



A
HISTORY
OF THE
EPIDEMIC FEVER,
WHICH PREVAILED IN
Bristol,
DURING THE YEARS 1817, 1818, AND 1819;
FOUNDED ON
REPORTS
OF
ST. PETER'S HOSPITAL
AND THE
BRISTOL INFIRMARY.



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A PRACTICAL TREATISE ON DISEASES OF THE
NERVOUS SYSTEM,

Designed to illustrate, by a large Collection of Cases and Dissections, chiefly derived from Hospital Practice, the Connexion of these Distempers with various Disorders of the Natural Functions.

The principal subjects are, Epilepsy, Mania, Ecstasis, Hysteria, Apoplexy, Palsy, Vertigo, and their different Modifications.

REPORT
OF THE
CASES OF FEVER,
&c.

SECTION I.

PRELIMINARY OBSERVATIONS.

IT seems to be a duty incumbent upon those physicians who are entrusted with the care of hospitals, to lay from time to time before the public, an account of any facts falling under their observation, a general acquaintance with which is likely to increase the stock of medical knowledge, or in any way to benefit the community. It has of late become a practice among the medical officers of such institutions, occasionally to publish brief statements calculated to illustrate the history of the diseases, the treatment of which has fallen into their hands. The first, and some of

the best of these Reports, have been obtained from the Infirmarys, and Houses of Recovery in Cork and Dublin: we already possess valuable treatises of the same kind from many of the hospitals of England and Scotland; and the increased punctuality and exertion which the present age demands in all classes of persons entrusted with public duties, renders it certain that this practice must and will become a general one.*

* On the advantages to be expected from this practice, I shall cite the words of a distinguished physician and excellent man, whose recent decease has occasioned a serious loss to the medical world:

“The communication of concise and well digested results of hospital experience, is a benefit which the public has a right to expect from every institution of that kind which it supports by its bounty. The value of such Reports is threefold: first, as they ascertain the fidelity and skill of the medical and other officers of the charity; secondly, as they serve to instruct practitioners, whose opportunities of experience are less extensive; and lastly, as they supply the most substantial contributions to the enlargement of science. For the materials of just Pathology can be drawn only from large masses of observation, assembled and arranged in the order of their subjects.”—*Practical Observations, &c. on Typhous Fever, by Edward Percival, M. B. &c.* 1819, p. 28.

Similar considerations have induced me on the present occasion, to follow this example, and to offer to the public an account of the appearances which the Epidemic Fever, lately prevalent, has presented in the hospitals in this city. I shall thus have an opportunity of fulfilling a task which I conceive to be due to the medical profession; and secondly, of laying before the persons who have entrusted me with the appointments I hold, a statement of some facts in which, I think, they cannot fail to be interested.

In adverting to the former of these objects, I may repeat an observation which already has oftentimes been made. It is chiefly in the practice of public hospitals that a collection of facts can be obtained, extensive enough to form the basis of any certain and well authorized conclusions in medicine. It is therefore from the records of hospitals that the principles of the medical art must be deduced, and the most important and substantial improvements of it expected. An infirmary presents a field in which the experimental comparison of various methods of treatment can be con-

ducted on a larger scale, and with fewer sources of fallacy, than in private practice. We have, indeed, received, during the last three years, several excellent Reports from the Physicians attached to Fever Hospitals; but it is apparent from the diversity of opinion which still subsists on some points of practical importance, that the mass of evidence is not yet complete, and that the testimony of additional facts is still called for. We must also bear in mind, that a common epidemic appears in particular districts under certain modifications, the effects of local and peculiar influences; and that it requires to be viewed under the agency of each variety of circumstances, before its general history can be made complete.

I shall not enter very deeply into the reasons which persuade me that the public will feel an interest in this subject. They are, in fact, sufficiently obvious.

Those who afford voluntary aid towards the support of a public institution, and the persons who are entrusted with the disposal of sums raised according to legal provisions, cannot be thought indifferent to

the manner in which these contributions are expended. They cannot be unwilling to receive any statements which tend to show that their charitable donations have been effectively applied, or which evince the necessity and prudence of the disbursements they have made. It will be gratifying to them to trace the proofs, that in either way they have contributed to the removal or alleviation of a large portion of human suffering.

There are also other considerations which must render the statements deduced from the records of hospitals interesting to the public at large, and particularly to the inhabitants of the city or town in which such hospitals are situated. It has been well observed by a distinguished writer, from whom we have lately received an account of the practice pursued in the Clinical wards of the Royal Infirmary of Edinburgh, that such documents are among the chief sources of information concerning the frequency or rarity, the increase or decrease of the most important diseases; and it is evident that the medical topography of particular districts, a subject involv-

ing the safety and comfort of the inhabitants in general, can only be illustrated in an authentic and satisfactory manner by having recourse to the same means.

The city of Bristol has been during several years remarkably free from contagious fever; but in the course of the last three years it has, in common with most towns and districts in the United Kingdoms, experienced its share of the visitations of this distemper. In the year 1817, there were sufficiently clear indications that it was on the increase,* and during

* In the autumn of 1817, I endeavoured to excite the attention of the public to this subject. Facts had fallen under my observation during the course of that year, which clearly indicated, as I thought, that contagious fever was on the increase in Bristol and its vicinity, and which rendered it probable that the diffusion of this disease would become very general. These facts, and the apprehensions founded upon them, together with some hints respecting the propriety of adopting public measures of precaution, were expressed by me in a letter which appeared in Felix Farley's Journal. The reception which this communication met with, was a general outcry against me for having created a groundless alarm. It is now well known to the public that the apprehension I entertained was fully verified. I need only to refer to a collection of letters published by an individual distinguished by her good sense and zeal for the

the course of the two succeeding years there were few or no parishes, and, I believe, few streets, where it has not frequently displayed itself. That period of the year has now arrived in which it has most generally prevailed, and the inhabitants of this city will probably be at this time interested in the records of its history, and the conclusions which may thence be deduced respecting the danger of its diffusion in future, and the means which afford the most probable expectations of arresting its progress, or mitigating its severity.

public good, in a pamphlet recommending the establishment of a Fever Hospital.

SECTION II.

REPORT of the Cases of Fever which have occurred at St. Peter's Hospital, or have been admitted on the Books, from June 1817 to December 1819, inclusive.

BEFORE I proceed to lay before my readers a record of the cases of fever which have been received into St. Peter's Hospital, or have originated within its walls, during the period which this Report embraces, it will be necessary to give a brief account of this asylum, for the information of strangers.

St. Peter's Hospital is not a building erected for the accommodation of the sick, but it is the general Poor-house of the whole city of Bristol, including the nineteen parishes which are within the limits.

Its construction is as awkward and inconvenient as it is possible to imagine. It is a confused heap of buildings, appended one to the other, without symmetry or plan, each part having been raised to answer some occasional purpose, as the original edifice, which is very old, was found inadequate to the exigencies which from time to time arose. Accordingly there are many parts of this hospital which it is impossible by any care sufficiently to ventilate, or to render decent and comfortable. During the last eight years it has undergone many improvements, among which is the establishment of medical wards, or distinct apartments for the sick, who previously to that time had no separate station, but were scattered through the whole house. Some of the wards, in their former state, particularly those appropriated to passengers, that is, to vagrants who are brought into the Hospital, and remain until they can be sent forward to their homes or parishes, were fitter receptacles for wild beasts than for human beings. There is still great room for improvement, though it would perhaps be

difficult to devise the means of effecting it, without pulling down the whole building to its foundations.

The inhabitants of this receptacle are, on an average, about 420; that is, it contains so many at one time; but a considerable proportion of this number are changed repeatedly in the course of a year. They consist of three classes of persons; the most numerous are of the same description as the inmates of other poor-houses; viz. the aged and infirm, who have a parochial right in Bristol, together with orphan children and all other persons possessed of the same claim, who on account of sickness or other circumstances are unable to maintain themselves, and do not receive pay out of doors. The second class includes all the vagrants and beggars who are found in Bristol, except such as the magistrates immediately expel from the city: they do not remain long in the hospital, but are sent forwards to their homes as speedily as possible, and consequently there is a frequent succession of them. Of this description of persons there is always a considerable number,

Bristol being the port at which Irish paupers are embarked from all the neighbouring parts of England, on their way to their native country; and during the late period of distress among the lower orders of people, there has been an unusual overflow of such visitors. The third class of inmates in St. Peter's Hospital, are the idiots and lunatics of the lower orders, who are sent to the house, under warrants, from all parts of the city, and are received, under particular circumstances, from the towns and villages in its vicinity.* The accommodation provided for these afflicted beings consists of an airy and spacious ward for the female lunatics, and a row of pens for the temporary confinement of those patients who are violent and intractable, not unlike the domiciles of the royal lions and

* There being no other place within a considerable distance of Bristol provided for the reception of insane paupers, the neighbouring parishes often transmit their lunatics to St. Peter's Hospital, where they are maintained, an adequate stipend being contributed by the respective parishes. There was lately a lunatic in this asylum sent from Chepstow in Monmouthshire. This man became infected with the fever which prevailed in the house, and, on his recovery, was found to have been restored to his intellects.

tigers in the menagerie of the Tower, though by no means so respectable in their appearance, or so commodious. These pens are now used only when the state of the patient requires strict confinement, or when by their noise and violence the other invalids are molested; but it would appear as if they were originally destined for the usual abode of male lunatics; at least no other receptacle has been provided within the Hospital for persons of this description. From this circumstance great inconveniences have arisen. The male lunatics and idiots in the house have been generally stationed in the medical wards, and when fever prevailed there, several of them were infected, and a remarkably large proportion of this number fell victims to the disease.*

The total number of names on the sick list of St. Peter's Hospital varies in different years: during some years it has

* Of nine male lunatics and idiots, who, owing to the deficient means of separation in St. Peter's Hospital, were exposed to the contagion and were attacked by fever, seven died: one, as before stated, recovered his sanity of mind; the other is still in the Hospital.

amounted to 1200. In this number are included many paupers living out of the house in the meanest districts of the city, who are attended regularly by the Apothecary, and occasionally visited by the Physicians at their own dwellings. The greater part of the number above mentioned has consisted of the infirm inmates of the Hospital, who frequently require medical care; and of the vagrants and other paupers who are brought in, labouring under diseases which occasion their detention for some time in the house. There is also a considerable number of syphilitic cases.

The following table exhibits in one view the whole number of in and out-patients in St. Peter's Hospital, from June 1817 to December 1819, inclusive.

1817.	In-patients.	Deaths.	Out-patients.	Deaths.
June	6	0	0	0
July	9	3	2	0
August	13	3	1	0
September	8	3	1	0
October	13	2	3	0
November	29	6	4	0
December	17	3	9	0
	<hr/>	<hr/>	<hr/>	<hr/>
	95	20	19	0

1818.	In-patients.		Deaths.		Out-patients.		Deaths.
January	21	-	4	-	1	-	0
February	14	-	4	-	7	-	0
March	16	-	0	-	4	-	0
April	7	-	1	-	6	-	0
May	7	-	1	-	4	-	0
June	14	-	1	-	5	-	0
July	5	-	1	-	11	-	0
August	20	-	2	-	7	-	0
September	9	-	0	-	4	-	0
October	20	-	1	-	28	-	0
November	8	-	0	-	6	-	1
December	8	-	1	-	7	-	2
	<hr/>		<hr/>		<hr/>		<hr/>
	150		16		90		4

1819.

January	15	-	0	-	1	-	0
February	4	-	0	-	1	-	1
March	12	-	2	-	18	-	1
April	10	-	0	-	6	-	0
May	11	-	1	-	8	-	0
June	13	-	1	-	20	-	1
July	4	-	2	-	11	-	0
August	9	-	1	-	9	-	0
September	5	-	0	-	13	-	0
October	8	-	3	-	17	-	0
November	6	-	0	-	13	-	0
December	8	-	1	-	21	-	0
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	105		11		138		3

The proportion of deaths will be best seen by placing the numbers collectively :

Cases in 1817, viz. In the last half of the year	}	89 + 19 = 108	Deaths 20
Cases in 1818 - -		150 + 90 = 240	Deaths 20
Cases in 1819 - -		105 + 138 = 243	Deaths 14
Total numbers - - -		Cases 591	Deaths 54

In these periods the average of mortality varies considerably; the whole number of deaths being greater in the last six months of 1817 than in the whole course of 1819, though the total number of patients was not half so great. In order to illustrate the causes of this and some other anomalies, I shall here insert a more detailed account of the cases that were received within the Hospital during the above period.

In this extract the names of the patients are set down and numbered, for the purpose of accurate reference. In a column next to the names are the ages of the patients when known: in another a brief designation of the leading symptoms, or of the general character of the case.* The number of days which had intervened be-

* I am sorry to have to remark that there are some chasms in this part of the table, in consequence of the accidental loss of a book in which the notes were written.

tween the beginning of the attack and the admission of each patient is marked down, when it was known or preserved. Beyond is one column for the dates of entry or admission, marking the day when each individual was received into the medical wards; another for the dates of discharges; and a third for those of deaths. When there was any other circumstance worthy of remark, it is noted at the bottom of the page.

REPORT OF THE CASES OF FEVER IN ST. PETER'S HOSPITAL;
FROM JUNE 1817, TO DECEMBER 1819.
FOR 1817.

No.	NAME.	Age.	Character of the Disease.	How many Days ill at Admission.	Entry.	Discharged cured.	Died.
1.	John Mearne		Pneumonic Sympt.		June 1	June 26	
2.	Anne Daniel	22	Enteric Symptoms		— 6	July 14	
3.	Mary Peardon	54	Gastric Symptoms		— 16	— 16	
4.	Mary Haycock	30	Cephalic Symptoms		— 17	June 25	
5.	James Uphill		Hepatic Symptoms		— 20	— 25	
6.	Bart. Scannett		Simple Fever		— 25	— 30	
7.	Mary Foot	19	Cephalic Symptoms		July 2		July 6.
8.	William Bennett		Pneumonic Sympt.		— 13	Sept. 1	
9.	Edward Hacking		Simple Fever		— 14	— 10	
10.	Anne Williams		Pneumonic Sympt.		— 16		July 27.
11.	Mary Dickius	63	Cephalic Symptoms		— 20	July 25	
12.	William Scamore		Simple Fever		— 23	Aug. 11	
13.	James Gregory		Simple Fever		— 29	— 7	
14.	Anne Daniel	22	Enteric Symptoms		— 29	Nov. 22	
15.	William Currier	19	Cephalic Symptoms		— 29	Aug. 11	
16.	James Tithill	40	Simple Fever		Aug. 1	Sept. 1	
17.	Joseph Wasgood		Cephalic Symptoms		— 8		Oct. 9.
18.	Richard Loan		Simple Fever		— 14	— 1	
19.	Jacob Burgess				— 14	— 13	
20.	William Simmonds	30	Cephalic Symptoms		— 18	Oct. 12	
21.	John White				— 20		Sept. 17.
22.	Margaret Mitchell				— 24	Aug. 27	
23.	William Mitchell				— 24	— 27	
24.	John Isles				— 24	Sept. 2	
25.	James Hickey				— 24	— 1	
26.	George Jones				— 24	— 5	
27.	Timothy Mitchell				— 28	— 12	
28.	Hannah Reading				— 28		Aug. 31.
29.	William Williams		Cephalic Symptoms		— 26		Sept. 4.
30.	William Gaskins		Simple Fever		Sept. 3	— 10	
31.	Patrick Bougie	40	Hepatic Symptoms		— 12	Oct. 5	
32.	William Load		Simple Fever		— 16	Sept. 22	
33.	William Evans		Cephalic Symptoms		— 24		Sept. 27.

3. Was a nurse, who sickened while attending in the fever ward.

5 and 6. Were Irish paupers on their way to Ireland.

7. Was a prostitute, and probably addicted to drinking drams. She had been lately discharged from the foul ward, and had been ill fourteen days when admitted.

14. Was the same person as No. 2.

17. Was a man admitted under a phrenzy warrant, and being, with the other male lunatics, exposed to the contagion of fever, in consequence of the want of proper means of separation, caught the disease.

22, 23 and 27. Were members of one family.

28. Was a pauper brought into the hospital in a state of extreme exhaustion.

29. Was a passenger found to be covered with scabics, upon which he was sent to the itch ward. His extremities ulcerated; an attack of fever supervened, and he sunk rapidly.

31. Was an exhausted Irish labourer, who had long suffered under fever with dysenteric symptoms. He was jaundiced: after death his intestines were found ulcerated, and the liver in a state of suppuration.

33. Was a stout robust man who had lain ill of a fever at his own dwelling, without any medical attendance, until in a delirium he threw himself out of a window into the street. He was then sent into the hospital under a phrenzy warrant.

No.	NAME.	Age.	Character of the Disease.	How many Days ill at Admission.	Entry.	Discharged cured.	Died.
34.	John Philips				Sept. 24	Oct. 21	
35.	Anne Bartlett				— 24	— 18	
36.	Eliz. M'Lean				— 27	— 1	
37.	William Currier	19	Simple Fever		Oct. 3	— 21	
38.	Sarah Cumplin		Simple Fever		— 6	— 26	
39.	John Brannin		Cephalic Symptoms		— 7		Oct. 10.
40.	William Callaghan		Hepatic Symptoms		— 7	— 29	
41.	Samuel Summers				— 7	— 29	
42.	John Monday				— 28	Nov. 12	
43.	John Hoskins				— 28	— 12	
44.	Mary M'Crie		Cephalic Symptoms		— 28	— 22	
45.	Thomas Hall		Simple Fever		— 28	— 31	
46.	William Haberfield		Simple Fever		— 30		Nov. 4.
47.	James Cleve				— 30	Dec. 2	
48.	John Smith				— 31	— 2	
49.	James Morgan				— 31	Nov. 12	
50.	Eliz. Earles				Nov. 3	Dec. 17	
51.	Anne James				— 3	Nov. 18	
52.	Anne Rich				— 3	Jan. 2	
53.	Mary Hicks				— 3	Nov. 26	
54.	William Jones				— 3	— 27	
55.	Rain Mahony	27	Cephalic Symptoms	4	— 3	— 27	
56.	Mary Walker	64	Cephalic Symptoms	1	— 5	Dec. 5	
57.	Anne Ward	40	Cephalic Symptoms	3	— 8		Nov. 15.
58.	Isaac Mason	36	Cephalic Symptoms	7	— 8		Nov. 16.
59.	Eliz. Rain	30	Hepatic Symptoms	6	— 8	— 24	
60.	William Spills	28	Pneumonic Sympt.		— 12	— 22	
61.	John Leaker	28	Gastric Symptoms	1	— 12	Dec. 2	
62.	Thomas White	13	Pneumonic Sympt.	1	— 12	Nov. 22	
63.	Eliz. Hale	6	Simple Fever		— 13	— 20	
64.	Roger Hale	60	Pneumonic Sympt.		— 13		Nov. 14.
65.	James Hillary	19	Gastric Symptoms	3	— 14	— 22	
66.	Letitia Philips	43	Cephalic Symptoms	1	— 15	Dec. 26	
67.	John Beaver	16	Simple Fever	4	— 15	Nov. 20	
68.	Mary Grant	30	Cephalic Symptoms	1	— 17	— 27	
69.	Eliz. Guy	64	Enteric Symptoms		— 18		Nov. 20.
70.	William Cramp	64	Cephalic Symptoms	1	— 18	— 27	

37. The same person as No. 15. He was the man who attended the patients ill of fever to the warm bath.

44. Was an occasional assistant to the nurse in the fever ward.

46. Was a case similar to No. 33, and under circumstances nearly similar.

59. This patient had a tumour extending from the hypochondria to the pelvis. She died under ascites, and with anasarca of the lower extremities. On examination after death, the liver was found to extend nearly into the pelvis, and to weigh 8lb. 4oz.

63 and 64. Had been sent from Chepstow by the parish officers with a walking pass. They arrived, labouring under fever, in the most deplorable state of exhaustion.

66. Was a lunatic in the house. When the fever subsided her reason was restored, since which time she has had no relapse.

68. A lunatic of scrofulous habit, who has experienced no diminution of her enterites, and died on the second day.

69. Was brought in in a state of extreme exhaustion, labouring under symptoms of insanity.

70. Was an insane man, who had been in a reputable condition of life. His mental condition was so much improved after the fever that his friends took him out.

No.	NAME.	Age.	Character of the Disease.	How many Days ill at Admission.	Entry.	Discharged cured.	Died.
71.	George Janney		Cephalic Symptoms		Nov. 18	Dec. 27	
72.	Shadrach Williams				-- 18		Nov. 21.
73.	Thomas Hennesy	38	Pneumonic Sympt.	2	-- 23	Dec. 2	
74.	Nanny Mahony	23	Cephalic Symptoms	2	-- 24	-- 2	
75.	Sophia Priory	22	Cephalic Symptoms	2	-- 24	26	
76.	Samuel Marat		Simple Fever		-- 26	2	
77.	Marian Robinson	19	Cephalic Symptoms	1	-- 26	-- 5	
78.	Edward Williams		Cephalic Symptoms		-- 29		March 6.
79.	Michael Donavon	30	Simple Fever	4	Dec. 1	-- 5	
80.	William Roberts	45	Simple Fever	7	-- 2	-- 26	
81.	Maria Robinson	19	Simple Fever		-- 9	Feb. 13,	1818.
82.	Esther Day		Simple Fever		-- 9	Jan. 21	
83.	George Gilman		Simple Fever		-- 9	Dec. 27	
84.	James Donavon	23	Cephalic Symptoms	2	-- 11	-- 26	
85.	John Ward	43	Hepatic Symptoms	7	-- 11		Dec. 16.
86.	Michael Quick	44	Simple Fever		-- 11	-- 16	
87.	Hannah Chivers				-- 17	Mar. 1	
88.	John King				-- 17	Dec. 26	
89.	Ellen King				-- 17	-- 26	
90.	Sarah Swash				-- 17	-- 27	
91.	Thomas Price		Moribund		-- 22		Dec. 23.
92.	Joseph Hawk		Cephalic Symptoms	7	-- 24		Dec. 4.
93.	Simon Foster		Simple Fever		-- 27	Feb. 20	
94.	Mary Sinnah				-- 27		Jan. 4.
95.	John Cullen				-- 29	Jan. 21	

71. A lunatic; still in confinement.

72. A man who was found in a cart, locked up in a stable, in a state of insensibility, covered with petechiæ, and with both legs in a state of gangrene. In this condition he was discovered and brought to the hospital. It appeared in evidence before the coroner, that the watchman observed the man to be ill, and scarcely able to crawl, and, it being late at night, put him into a stable, and covered him with hay and straw, and forgot afterward to go and take him to the hospital. He had lain there several days.

76. Recently from confinement in Exeter jail.

77. An inmate of the house, who occasionally assisted the nurse of the fever ward.

78. A lunatic, previously in the house.

80. Was brought in in a state of exhaustion.

81. Is the same person as No. 77, the assistant nurse of the fever ward.

82. Was appointed to supply the place of No. 81, but was attacked the same day.

85. Recently arrived from Blackfriar's prison; while he was there, a black man was stated to have died of fever. Several who came about this time from London attributed their infection to having been placed in this prison. A letter was written to the Lord Mayor on the subject, but it appeared that there was no fever in the prison.

91. Was brought in moribund from the streets.

FOR 1818.

No.	NAME.	Age.	Character of the Disease.	How many Days ill at Admission.	Entry.	Discharged cured.	Died.
1.	George West	50	Pneumonic Disease	1	Jan. 6	Jan. 28.	
2.	John Taylor		Exhaustion		— 8	— 11.	
3.	John Jones				— 8	Jan. 28	
4.	Robert Clarke				— 12	— 29	
5.	Richard Williams				— 13	March 4	
6.	Samuel Turner				— 13	Jan. 28	
7.	John Williams				— 16	Feb. 4	
8.	Samuel Webber				— 16	— 4	
9.	John Thomson				— 16	Jan. 28	
10.	James Swayne				— 16	March 4	
11.	Joseph Powell		Exhaustion		— 20		— 21.
12.	Unknown		Moribund		— 20		— 20.
13.	Henry Wilson		Simple Fever		— 23	Feb. 25	
14.	Sarah Mullins		Simple Fever		— 24	— 13	
15.	Mary Rudd	55	Simple Fever	1	— 26	— 4	
16.	Joseph Planter	13	Gastric Symptoms	4	— 26	— 4	
17.	Anne Hall		Simple Fever		— 26	— 13	
18.	Michael Adkins		Simple Fever	2	— 26	— 4	
19.	James Planter		Simple Fever		— 28	— 4	
20.	William Ward		Simple Fever		— 28	March 4	
21.	Edward Lewis		Simple Fever		— 31	Feb. 20	
22.	Henry Grismond	47	Gastric Symptoms	1	Feb. 2	Feb. 19.	
23.	William Current		Simple Fever		— 4	Mar. 17	
24.	William Cleland		Simple Fever		— 4	Feb. 20	
25.	William Cale	60	Exhaustion		— 4	Feb. 6.	
26.	George Evans		Simple Fever		— 5	March 4	
27.	Thomas Brine		Exhaustion		— 6	Feb. 7.	
28.	Jos. Holland		Simple Fever		— 6	Feb. 25	
29.	Anne Prothever	22	Cephalic Symptoms	14	— 6	Feb. 12.	
30.	Esther Day				— 7	Feb. 20	
31.	Sarah Malpos				— 9	— 20	
32.	Samuel Cooper				— 9	— 25	
33.	Thomas Parr				— 24	March 4	
34.	Eleanor Hughes				— 24	April 1	
35.	Mary Smith				— 24	Mar. 4	
36.	John Hampton				Mar. 4	— 17	
37.	John King				— 4	— 25	
38.	David Jones				— 4	— 25	
39.	Mary Brown				— 9	April 1	
40.	William Brown				— 11	— 1	

8. Was a boy who attended the male patients, ill of fever, to the hot bath.

12. Was a woman, brought in from the streets, far advanced in the disease, and quite insensible. Her name and person unknown. She died the next day.

16 and 19. Were two brothers, travelling paupers.

22. Was the man who attended as undertaker in the hospital.

24. Was a beggar, who had been wandering about in a half starved condition for some months.

29. Was a servant at a tavern. She had been ill a fortnight previously to her admission.

30. Was a deputy nurse to the fever ward.

31. Was a woman employed in washing the sheets of the fever wards.

33. A boy resident in the house.

39, 40, 41, 42, 43, 44, and 45. Were boys residing in the hospital, who appeared to derive the disease from contagion.

No.	NAME.	Age.	Character of the Disease.	How many Days ill at Admission.	Entry.	Discharged cured.	Died.
41.	William Walters				Mar. 11	Mar. 17	
42.	Thomas Farr	10		1	— 11	— 17	
43.	George Whitehead				— 11	April 3	
44.	Sarah Downser				— 11	Mar. 25	
45.	Daniel Davies				— 11	— 17	
46.	John Wilton				— 21	April 1	
47.	John Williams				— 21	Mar. 28	
48.	Thomas Birch				— 23	April 3	
49.	Augustus Sanders				— 28	— 3	
50.	Nicholas Smith				— 28	— 8	
51.	Edward Birch				— 29	— 8	
52.	William Baker	16			April 2		April 10.
53.	Gilbert Marshall				— 8	— 15	
54.	Daniel Collins				— 12	— 29	
55.	George Hawker				— 12	— 24	
56.	Richard Hill				— 21	May 27	
57.	Mary Yearman				— 22	— 29	
58.	William Wood				— 25	April 27	
59.	Thomas Kaddy		Gastric Symptoms		May 1	May 22	
60.	Thomas Palmer		Pneumonic Sympt	1	— 6	— 27	
61.	John Millard		Simple Fever		May 8	July 31	
62.	Anne Parnesby	22	Cephalic Symptoms		— 15	June 15	
63.	David Fitzgerald	30	Hepatic Symptoms		— 23		June 4
64.	Mary Woodman	24	Cephalic Symptoms		— 30	June 20	
65.	Sarah Roberts		Simple Fever		— 30	July 22	
66.	Anne Jones		Simple Fever		June 2	July 8	
67.	Sarah Skooult		Simple Fever		— *5	June 24	
68.	Eliz. Kief		Gastric Symptoms		— 5	— 24	
69.	Peggy Grimes		Simple Fever		— 5	— 24	
70.	J. Kief and Child		Simple Fever		— 8	— 24	
71.	Eliz. Harding		Simple Fever		— 13	— 29	
72.	Chas. Parker		Simple Fever		— 13	— 24	
73.	Robert Spencer		Simple Fever		— 14	— 26	
74.	John Jelter	20	Cephalic Symptoms		— 16	— 24	
75.	William Skinner	60	Gastric Symptoms		— 20	July 7	
76.	Loveday Dover	24	Cephalic Symptoms		— 20	June 29	
77.	Phœbe Elliston		Simple Fever		— 23	July 1	
78.	William Baker				— 24		June 29
79.	William Dover		Simple Fever		— 26	July 29	
80.	Mary Nichol	30	Pneumonic Sympt.		— 26	Scpt. 9	
81.	Harriet Witchell		Simple Fever		July 1	July 14	
82.	John Williams				— 17	Aug. 12	

48. Was under similar circumstances.

51. A boy residing in the house, brother to No. 48.

52. An idiotic boy, subject to epilepsy.

58. A boy of the house.

59. An inhabitant of the house.

63. Died suddenly, and without any symptoms indicating danger.

I was prevented from ascertaining the cause of death by some rules of the house, which sometimes render the examination of bodies difficult.

* About the beginning of June twelve cases of Rubeola appeared among the children: the Pneumonic symptoms were so severe, that scarcely one escaped the lancet.

70. Was in a state of exhaustion.

75. An inhabitant of the house.

80. Came in with her extremities in a state of gangrene.

No.	NAME.	Age.	Character of the Disease.	How many Days ill at Admission.	Entry.	Discharged cured.	Died.
83.	Rosey M'Halland	45	Pneumonic Sympt.	2	July 19	Sept. 9	
84.	Anne Beer	6	Cephalic Symptoms	2	— 19	Oct. 1	
85.	Richard Lynne	61	Diarrhea	14	— 23		July 26
86.	Mich. Donavon	19	Simple Fever		Aug. 4	Aug. 12	
87.	Josh. Johnson	30	Simple Fever		— 5	Aug. 31	
88.	William Neale	24	Effusion in the Chest		— 7		Aug. 7
89.	Joseph Driver	7	Cephalic Symptoms		— 8	— 31	
90.	Thomas Farr	12	Simple Fever		— 11	— 21	
91.	Dennis Colman	30	Pneumonic Sympt.	4	— 12	— 19	
92.	William Jackson	23	Pneumonic Sympt.		— 12		Aug. 16
93.	John County	30	Cephalic Symptoms	2	— 13	— 26	
94.	John O'Donnoghue		Simple Fever		— 14	— 19	
95.	John Breshanny		Cephalic Symptoms	2	— 14	— 21	
96.	Chas. Hungerford		Simple Fever		— 14	— 21	
97.	Daniel Swiney	20			— 16	— 19	
98.	Edward Harding	31	Ceph. & Hep. Symp.		— 19	Sept. 2	
99.	John Grace		Simple Fever		— 21	Aug. 26	
100.	Richard Groves		Cephalic Symptoms	9	— 21	Sept. 22	
101.	Eliz. Driver	44	Gastric Symptoms		— 22	— 22	
102.	Patience Bevan		Simple Fever		— 27	— 5	
103.	Thomas Jones	4	Simple Fever		— 27	— 11	
104.	Chas. Webber	10	Cephalic Symptoms		— 27	— 11	
105.	William Thomas	12	Simple Fever		— 28	— 22	
106.	Henry Thomas	5	Simple Fever		Sept. 2	— 22	
107.	James Parsons	5	Gastric Symptoms		— 2	— 22	
108.	Anne Groves	30	Cephalic Symptoms	4	— 9	Oct. 7	
109.	Jane Groves	12	Pneumonic Sympt.	4	— 9	— 7	
110.	Eliz. Trip	67	Gastric Symptoms		— 9	— 23	
111.	William Archer		Simple Fever		— 17	— 7	
112.	Rachel Bowden	52	Gastric Symptoms		— 16	Nov. 30	
113.	Ellen Walters	12	Cephalic Symptoms	1	— 27	Oct. 27	
114.	Anne Walters	8	Cephalic Symptoms	1	— 27	— 27	
115.	Henry Harris	8	Ceph. & Pneu. Sym.	3	Oct. 4	— 27	
116.	Michael Hagnes	38	Simple Fever	3	— 5	— 9	
117.	Jere Murphy	22	Pneumonic Sympt.	2	— 5	— 9	
118.	Jos. Theyer	14	Gastric Symptoms	14	— 6	Dec. 23	

84. Was a child resident in the house.

85. A man brought into the house in a state of exhaustion.

86. An Irish passenger.

89. A child of the house.

90. Ditto.

91. An Irish labourer.

93. A companion of No. 91.

95. Had slept in the same room with Nos. 91 and 92, previously to their admission. 93, to 97, inclusive. Were Irish passengers on their way to Ireland.

98. Was brought in in a state of delirium and unconsciousness.

101. Was a deputy nurse to the fever ward.

102. Was a laundry woman.

104. Was a boy who waited on the patients at the bath.

105. A shop-boy who occasionally carried medicines to the fever wards.

106, and 107. Were two children of the house.

110. A nurse of the fever ward.

112. An inhabitant of the house.

113, 114, and 115. Children of the house.

118. Had a relapse on Nov. 18th.

No.	NAME.	Age.	Character of the Disease.	How many Days ill at Admission.	Entry.	Discharged cured.	Died.
119.	John Theyer	57	Pneumonic Sympt.	5	Oct. 6	Dec. 23	
120.	Eliz. Theyer	52	Exhaustion	21	— 6		Oct. 8
121.	Anne Theyer	16	Cephalic Symptoms	2	— 6	— 23	
122.	Anne Thomas	14	Simple Fever	1	— 7	Oct. 14	
123.	Eliz. Jelfh		Simple Fever	1	— 12	— 27	
124.	Eliz. Powell	3	Cephalic Symptoms	1	— 20	Nov. 1	
125.	John Graham	29	Simple Fever	1	— 20	— 1	
126.	Eliz. Titcomb	16	Cephalic Symptoms	2	— 24	— 30	
127.	Thomas Moore	26	Cephalic Symptoms	3	— 24	— 30	
128.	Anne Wost	12	Cephalic Symptoms	1	— 24	— 30	
129.	Sarah Chepstow		Simple Fever	1	— 24	— 30	
130.	Anne Beer	7	Cephalic Symptoms	1	— 26	— 30	
131.	Marian Powell	30	Enteric Symptoms	1	— 26	— 30	
132.	Eliz. Harwood	28	Hepatic Symptoms	14	— 29	Jan. 30	
133.	Robert Hitchcock	22	Enteric Symptoms	2	— 29	Nov. 12	
134.	Eliz. Seton	20	Enteric Symptoms	12	— 29	Dec. 23	
135.	William Boyd	21	Simple Fever	1	Nov. 2	Nov. 10	
136.	George Jones	73	Enteric Symptoms	1	— 6	— 14	
137.	Anne Wilkins		Cephalic Symptoms		— 8	Jan. 1	
138.	Hannah Thomson	57	Pneumonic Sympt.	1	— 9	Dec. 23	
139.	Eliz. Theyer	10	Simple Fever	1	— 10	— 23	
140.	William Bleakley	25	Cephalic Symptoms	4	— 11	— 30	
141.	Mary Gage	36	Simple Fever	1	— 30	— 7	
142.	Luke Hardwell	64	Cephalic Symptoms	1	Dec. 9	— 22	
143.	Hester Clay		Cephalic Symptoms	1	— 11	— 23	
144.	Mary Reid	58	Hepatic Symptoms	2	— 14	Jan. 27	
145.	John Thomas	70	Moribund		— 16		Dec. 17
146.	John Harwood	30	Tertian type	3	— 18	— 6	
147.	William Carpenter		Simple Fever		— 19	Dec. 30	
148.	William Mark		Simple Fever		— 20	— 30	
149.	Fanny Dowley	20	Cephalic Symptoms	21	— 26	Jan. 27	
150.	John Harris.	66	Gastric Symptoms	3	Nov. 5		

118, to 121 inclusive. Were a poor family who resided in a small kitchen, in Ring's Buildings, Pipe Lane, where they were lying on a bed of straw, having sold every thing they had to procure food.

122. Nurse of the fever ward:—in this case the fever was cut short by emetics.

123. A servant of the house, who carried food to the fever ward.

124. A child of a nurse, who attended the fever ward.

126. A child of the house.

129. A case cut short by emetics.

130. A child of the house.

131. A Nurse of the fever ward, mother to No. 124.

132. This case terminated in abscess of the liver.

134. Was convalescent on the 16th November, and had a relapse on the 21st.

139. Was a sister of No. 121.

143. Was a woman subject to inflammatory attacks.

145. Was brought in in a state of extreme exhaustion, said to have come recently from the coast of Guinea.

146. Was recently arrived from Kent.

FOR 1819.

No.	NAME.	Age.	Character of the Disease.	How many Days ill at Admission.	Entry.	Discharged cured.	Died.
1.	Charles Silcox	14	Cephalic Symptoms	1	Jan. 2	Jan. 27	
2.	John Charnock	52	Pneumonic Sympt.	7	— 5	Feb. 12	
3.	Eliz. Charnock	40	Hepatic Symptoms	4	— 5	— 12	
4.	E. Charnock's child	6	Ceph. & Pnen. Sym.	2	— 6	— 12	
5.	William Jones	23	Simple Fever		— 6	Jan. 27	
6.	John Roberts	20	Cephalic Symptoms		— 12	— 27	
7.	William Carrier	19	Cephalic Symptoms		— 14	— 20	
8.	John Monkton	9	Cephalic Symptoms		— 14	— 30	
9.	Thomas Bonnetto	24	Pneumonic Sympt.		— 14	— 30	
10.	Lewis Morgan		Simple Fever		— 17	— 30	
11.	Edward Hemight		Simple Fever		— 17	— 30	
12.	Stephen Newport	34	Simple Fever		— 22	— 30	
13.	Michael Leary	20	Simple Fever		— 24	— 30	
14.	Hannah Chivers	11			— 30	Feb. 8	
15.	William Williams	40	Pneumonic Sympt.		— 30	— 24	
16.	Daniel Daggan	24	Pneumonic Sympt.		Feb. 4	— 26	
17.	Margaret Nagle	16	Cephalic Symptoms	6	— 13	April 7	
18.	Charles Thomas	7	Simple Fever		— 19	Feb. 28	
19.	Thomas Hntchins'	16	Ceph. & Pneu. Sym.	14	— 20	Mar. 12	
20.	Mary Redwood	26			Mar. 3		
21.	Sarah Castle	32	Hepatic & Cephalic		— 5	May 5	
22.	Unknown		Moribund		— 7		Mar. 8.
23.	Ellen Nagle	12	Gastric Symptoms	4	— 9	April 30	
24.	John Nagle	11	Gastric Symptoms	3	— 9	Mar. 31	
25.	William Jackson	23	Pneumonic Sympt.		— 11	— 26	
26.	John Weston	19	Simple Fever	7	— 15	May 26	
27.	John Scannell	25	Cephalic Symptoms	8	— 15	— 26	
28.	Mary Peele		Pneumonic Sympt.	2	— 20		
29.	William Hobbs	63	Exhaustion		— 21		Mar. 25.
30.	John Reilly	16	Gastric Symptoms		— 24	April 12	
31.	Eliz. Roberts	25	Cephalic Symptoms		— 27	May 26	
32.	George Grace	47	Exhaustion		April 1	April 23	
33.	James Romaine		Simple Fever		— 1	— 7	
34.	Hannah Napper	45	Simple Fever		— 9	May 14	
35.	Sarah Bankham	6	Simple Fever		— 10	— 12	
36.	Eliz. Jelph	60	Pnen. & Drop. Sym.		— 12	— 24	
37.	Anne Hishcock	9	Simple Fever		— 12	— 24	
38.	James Rogers	50	Simple Fever		— 12	— 12	
39.	Henry Thomas	12	Simple Fever		— 15	— 2	
40.	Sannel Allen	20	Cephalic Symptoms		— 23	— 26	

2, 3, 4, and 6. Were reported to have taken the disease after exposure to contagion.

14. A child of the house—caught the disease.

15. A man subject to Epilepsy, and an inmate of the house—caught the disease.

16. Brought in from a garret in Marsh Street, where she was found lying on straw.

22. A man brought in from the glass-house in a moribund state.

22, and 23, were brother and sister to No. 17.

29. Was brought from the glass-house.

34, 35, and 36. Were inmates of the house.

36. Was a woman occasionally employed in carrying food to the convalescents.

38. Was admitted in a state of exhaustion.

39. Was a brother to No. 18.

No.	NAME.	Age.	Character of the Disease.	How many Days ill at Admi-sion.	Entry.	Discharg:d cured.	Died.
41.	Mary Grant		Simple Fever		April 24	May 10	
42.	Mary Nichols	25	Cephalic Symptoms		May 2	Jan. 20	
43.	Robert Jones		Cephalic Symptoms		— 2	May 26	
44.	John Price	50	Pneumonic Symp.		— 4	June 11	
45.	Thomas Perry	18	Ceph. & Pneu. Symp.		— 6	— 25	
46.	Henry Jones		Simple Fever		— 7	— 12	
47.	Benjamin Curtis	47	Hepatic Symptoms		— 15	May 16	
48.	Bridget Allen	9	Simple Fever		— 16	June 9	
49.	Thomas Allen	10	Simple Fever		— 16	— 9	
50.	Hannah Chivers	50	Cephalic Symptoms		— 28		June 21
51.	James Thomas		Simple Fever		— 29	— 4	
52.	Thomas Murray		Simple Fever		— 29	— 4	
53.	Anne Hillary	79	Gastric Symptoms		June 3	— 14	
54.	Thomas Baynton		Simple Fever		— 6	— 23	
55.	John Cooper		Simple Fever		— 6	— 18	
56.	Sarah Thompson		Simple Fever		— 6	— 18	
57.	Anne Parker	70	Gastric Symptoms	2	— 9		July 10
58.	Andrew Martin	55	Pneumonic Symp.	14	— 9	— 18	
59.	Elizabeth Dovrick	64	Pneumonic Symp.		— 16	July 1	
60.	Elizabeth Adkins	3	Simple Fever		— 16	June 30	
61.	Phœbe Shipstone	20	Pneumonic Symp.		— 17	July 16	
62.	James Hill		Simple Fever		— 18	June 23	
63.	William Davis		Simple Fever	3	— 19	— 24	
64.	Thomas Jones		Simple Fever		— 19	— 23	
65.	Lewis Morgan		Simple Fever		— 24	July 7	
66.	Thomas Burke		Simple Fever		July 1	— 25	
67.	Margaret Smith		Exhaustion		— 1		July 10
68.	Isaac Nash	56	Simple Fever		— 15	— 21	
69.	Thomas White	17	Cephalic Symptoms.		— 23		— 30
70.	Jane Wheeler	25	Enteric Symptoms.		Aug. 4		Oct. 13
71.	Charles Thomas		Simple Fever		— 9	Aug. 25	
72.	Thomas Kaddy	60	Simple Fever		— 9	— 25	
73.	William Franklin	12	Enteric Symptoms		— 11	— 26	
74.	James Heywood		Simple Fever		— 19	— 25	
75.	George Williams		Simple Fever		— 20	Sept. 1	
76.	Henry Fratcham	11	Pneumonic Symp.		— 24	Aug. 29	
77.	Mary Bishop		Simple Fever		— 30	Sept. 20	
78.	William Currier	19	Cephalic Symptoms		— 50	— 20	
79.	James Marsh	48	Enteric Symptoms		Sept. 5	*	

41. A Lunatic, who recovered, and remains in the same state as before the attack.
48 and 49. Were relations of No. 40, and appeared to owe their disease to conta-gion.

50. Was brought from prison in extreme exhanstion, and died under paralysis.

51 and 52. Were travellers.

53. An inhabitant of the house.

57. This old woman was an inhabitant of the house.

61. A dumb girl, inhabiting the house.

62 to 66 inclusive. Were children of the house.

69. A boy subject to epilepsy, who expired suddenly in a fit.

70. Had been attacked by fever shortly after lying-in. She had been neglected previously to her coming into the hospital. After her admission, she had repeated attacks of enteritis, relieved by leeches and purgatives. At length, she sank under dysentery. This case seems to have been peritonitis in its commencement.

78. Has had repeated attacks.

79. This and other cases marked with the asterisk, are still in the wards.

No.	NAME.	Age.	Character of the Disease.	How many Days ill at Admission.	Entry.	Discharged cured.	Died.
80.	Robert Bud	10	Simple Fever		Sept. 20	Sept. 27	
81.	William Curtis		Simple Fever		— 21	Oct. 13	
82.	Sarah St. John	15	Cephalic Symptoms		— 25	Sept. 30	
83.	Anne Barry	39	Simple Fever		— 25	Oct. 4	
84.	John Leaker	33	Cephalic Symptoms		Oct. 1	— 10	
85.	Dennis Kintoun		Enteric Symptoms		— 2		Oct. 13
86.	Mary Cooper	28	Ceph. & Pneu. Symp.		— 12	Nov. 10	
87.	Thomas Greenslade		Ceph. & Pneu. Symp.		— 12		— 15
88.	John Wooding	47	Enteric Symptoms		— 16	Nov. 12	
89.	Charles Butterfield		Simple Fever		— 22	Oct. 25	
90.	Mary Coventry	20	Ceph. & Pneu. Symp.		— 30	Dec. 7	
91.	Hannah Roach	18	Pneumonic Symp.		— 30		Nov. 8
92.	James Boyd	57	Simple Fever	14	Nov. 8	*	
93.	Anne Thorne		Simple Fever		— 8	Nov. 12	
94.	William Wilson	29	Cephalic Symptoms		— 10	— 24	
95.	Thomas Taylor	14	Enteric Symptoms		— 11	— 29	
96.	Thomas Skinner	14	Enteric Symptoms		— 11	— 28	
97.	Hopkin Hopkins		Enteric Symptoms		— 26		
98.	David James	46	Pneumonic Symp.		Dec. 3		Dec. 6
99.	William Morgan	7	Enteric Symptoms		— 9	*	
100.	Henry Adams	9	Cephalic Symptoms	3	— 16	Dec. 30	
101.	George David	15	Ceph. & Pneu. Symp.	4	— 16		
102.	Charles Maddox	15	Ceph. & Pneu. Symp.	3	— 22	*	
103.	Jane Osborne	52	Enteric Symptoms		— 26	*	
104.	John Jones	9	Pneumonic Symp.		— 28	*	
105.	Anne Dann	25	Pneumonic Symp.	14	— 29	*	

84. An inhabitant of the house.

87. Had been several days extremely delirious, and was almost in a moribund state before he was admitted. He came from a hovel in St. Philip's, which was a lodging-house. His wife was ill at the same time.

90 and 91. Were admitted from the same hovel.

90. A severe case of pneumonia typhoides.

91. Died with gangrene on her back.

99, 102, 104. Were children of the house.

95, 96, 97, 99, 103, Were cases of fever with dysenteric affection.

103. Was an inmate.

Those marked with the asterisk are still in the wards.

Report completed Dec. 31, 1819.

Remarks on the foregoing Report.

In this Report we find the number of deaths considerable, in proportion to the admissions. During the last seven months of the year 1817, there are twenty deaths in ninety-five cases: during 1818, there are sixteen in a hundred and fifty cases; and during 1819, there are eleven in a hundred and five cases.

This large proportion of deaths, especially in the first Report, may be satisfactorily accounted for from the circumstances under which the individuals who formed the catalogue were commonly admitted into the hospital. Many were brought in from the streets in a condition altogether hopeless. Some of them, subsequently to the attack of fever, had been lying in lanes, or on the road-sides, without shelter from the inclemency of the weather, and destitute of the means necessary for supporting life even under ordinary circumstances: they were at length brought, in the last stage of exhaustion, to die in the hospital. Others had lain ill in their narrow and con-

fined hovels, and without any medical attendance, until the time for relieving them was entirely passed : when they were brought into the house, the signs of death were already upon them. Some travelling paupers had been obliged to proceed on their way when actually labouring under fever ; the parochial officers of places through which they passed, being apprehensive of their becoming burdensome to their respective parishes. This was the case of two persons mentioned in the First Report, who were sent on under walking passes, and one of whom expired soon after his arrival.

If the twenty cases which terminated fatally in the Report of 1817, are considered, it will be seen, that most of them were of such a description, that the event might have been predicted on their admission. Numbers 7, 28, 29, 31, 64, 69, 72, 91, were introduced already moribund, or in a state of extreme exhaustion : these persons sunk immediately, or very shortly after they were brought into the house. Nos. 33, and 46, were admitted under phrenzy warrants, in a state of high deli-

rium ; they had previously had no medical assistance, and the attention of their neighbours was at length accidentally attracted. Nos. 11, 39, and 85, survived their admission a very short time.

Of the 16 deaths which occur in the Report of 1818, there were seven which took place in cases admitted under extreme exhaustion or actually moribund ; scarcely any of these individuals survived their admission 48 hours. These are Nos. 2, 11, 12, 25, 27, 85, 120. No. 88 was already labouring under effusion in the chest. Nos. 52, 92, as well as No. 21, in the Report of 1817, were idiots ; and it appears from what we have observed in St. Peter's hospital, that idiots, maniacs, and epileptics, are particularly subject to sudden death when attacked by fever : a fact which it is not difficult to explain. If we abstract then eight cases, as in propriety we ought, the remaining eight out of 150 persons, will form but a moderate proportion of deaths.

Of the 11 deaths in 1819, nearly the whole number were in cases in a state of extreme exhaustion when admitted. It

may be seen by referring to the dates in the Report, that very few of the persons alluded to survived more than two or three days in the hospital.

It is proper further to remark that as it has been a general practice to introduce the worst cases that occurred among the out-patients into the house, in order to have a better opportunity of attempting their relief, the list of in-patients may be considered as a selection of the severest examples of disease out of the whole number of cases. Therefore in estimating the average of mortality, we ought to take the total numbers, including both in and out-patients. These, as I have shewn in a former page, are 20 deaths in 108 cases during 1817, 20 in 240 during 1818, and 14 in 243 during 1819, or collectively 54 deaths in 591 cases during the whole period which this Report includes.

Out of the total number of in-cases, it may be noticed that 70 are marked down as occurring in the inhabitants of the hospital. Of these 70 persons attacked within the house, there are 24 who may be proved to have had communication with the fever

wards. In the whole number it may be presumed that the disease originated in consequence of the defective means of separation which the narrow limits of the house allow.*

* A large house in St. Michael's parish, standing in an elevated situation, was at one time hired by the Corporation of the poor for the purpose of more effectual separation; thither all the fever cases were removed. While this measure was pursued, no fresh cases occurred in the hospital. But the committee were induced, by circumstances that arose, to give it up in a very short time. It may be worth while to remark, that some patients who had become convalescent at the house in St. Michael's, suffered relapse on being brought back to the hospital.

SECTION III.

*REPORT of the Cases of Fever admitted
at the Bristol Infirmary.*

AMONG the rules of the Bristol Infirmary, there is one which expressly forbids the admission of any patient labouring under contagious fever. For many years, however, this rule has been considered as only indicating the ignorance or unreasonable timidity of those who enacted it, and it has been a general practice to prefer such cases, when they have been offered for admission, to all others. Fortunately for the public, it has happened that the house-committee, on which the enforcement of the rules depends, has been composed of men of too much good sense and intelligence to interfere with the decision of the physicians.

The following is a table of the number of cases of fever admitted from July 1817 to December 1819, inclusive.

1817.	In-patients.		Out-patients.			
July	-	-	8	-	-	5
August	-	-	4	-	-	2
September	-	-	9	-	-	9
October	-	-	10	-	-	3
November	-	-	9	-	-	3
December	-	-	7	-	-	3
			<hr/>			<hr/>
			47			25

1818.	In-patients.		Out-patients.*		Deaths.
January	3	-	8	-	0
February	6	-	4	-	1
March	9	-	4	-	0
April	6	-	4	-	1
May	14	-	5	-	1
June	19	-	10	-	1
July	26	-	17	-	1
August	20	-	17	-	3
September	23	-	16	-	4
October	17	-	14	-	1
November	17	-	6	-	0
December	17	-	7	-	3
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	172		112		16

* It must be remarked, that the deaths here marked down were all among the in-patients, and that as we have no account of the events of many of the cases of out-patients, it is possible that some deaths may have occurred among them. But this is not very probable, because they were in general very slight cases: those patients who complained of any symptoms which indicated danger, were taken into the house.

1819.	In-patients.		Out-patients.		Deaths.
January	15	-	6		1
February	15	-	8	-	0
March	27	-	14	-	2
April	19	-	3	-	1
May	20	-	12	-	1
June	13	-	8	-	2
July	13	-	10	-	1
August	15	-	9	-	0
September	18	-	10	-	0
October	7	-	8	-	0
November	12	-	3	-	0
December	14	-	4	-	0
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	198		93		8

The total number of cases during this period, is 647.

The following table contains a more detailed account of the cases of In-patients, from the commencement of 1818 to the end of 1819.

REPORT OF THE INFIRMARY IN-PATIENTS FOR 1818.

No.	NAME.	Age.	Character of the Disease.	Entry.	Discharged cured.	Died.
1.	Mary Clarke	28	Simple Fever	Jan. 8	Jan. 24	
2.	William Howell	35	Cephalic Symptoms	— 12	Feb. 24	
3.	Eliz. Gough	9	Cephalic Symptoms	— 26	— 26	
4.	Charles Gough	14	Simple Fever	Feb. 2	— 14	
5.	Thomas Baker	38	—————	— 5		Mar. 26
6.	Thomas Pritchard	28	Pneumonica	— 9	Mar. 12	
7.	Ann Edwards	22	Cephalic Symptoms	— 13	— 19	
8.	John Anderson	43	Simple Fever	— 19	— 15	
9.	Daniel Crawley	45	Pneumonic Sympt.	— 26	— 22	
10.	Sarah Edmonds	42	Enteric Symptoms	Mar. 2	July 9	
11.	Ann Ruddock	22	Simple Fever	— 2	Mar. 22	
12.	John Knight	18	Simple Fever	— 2	April 23	
13.	Solomon Barnett	25	Pneumonic Sympt.	— 9	— 4	
14.	William Hart	24	Pneumonic Sympt.	— 19	Mar. 24	
15.	Isaac Sanders	24	Cephalic Symptoms	— 19	April 11	
16.	Mary Williams	15	Typhoid Symptoms	— 23	— 29	
17.	Sarah Lambert	24	Cephalic Symptoms	— 30	May 10	
18.	Thomas Phillips	35	Simple Fever	— 30	April 4	
19.	James Davis	26	Cephalic Symptoms	April 6	— 25	
20.	Thomas Fenny	45	Hep. & Ceph. Symp.	— 16		April 21
21.	John Hughes	50	Typhoid Symptoms	— 20	June 8	
22.	Sarah Chiddy	30	Typhoid Symptoms	— 20	May 9	
23.	Jane Smith	28	Gastric Symptoms	— 27	June 24	
24.	John Closs	20	Cephalic Symptoms	— 30	— 18	
25.	Maria Isles	14	Pneumonic Sympt.	May 4	Aug. 4	
26.	Mary Salter	19	Pneu. & Ceph. Sym.	— 7	June 24	
27.	Jos. Warrington	26	Cephalic Symptoms	— 7	May 19	
28.	Alex. Bowyer	50	Gastric Symptoms	— 15	July 7	
29.	Ann Gallop	26	Gastric Symptoms	— 18	— 27	
30.	Patrick M'Donald	45	Typhoid Symptoms	— 20		May 24
31.	George Harris	59	Pneumonic Sympt.	— 26	May 30	
32.	Cath. Bryant	32	Pneumonic Sympt.	— 26	July 11	
33.	Eliz. Latham	22	Cephalic Symptoms	— 26	June 1	
34.	Thomas Rayne	20	Ceph. & Pneu. Sym.	— 26	July 23	
35.	Andrew Bartlett	32	Ceph. & Pneu. Sym.	— 26	— 13	
36.	Henry Nichols	34	Simple Fever	— 26	May 31	
37.	John Brown	55	Cephalic Symptoms	— 26	June 7	
38.	Isaac Kidwell	28	Ceph. & Pneu. Sym.	— 28	July 2	
39.	Rebecca Jones	56	Simple Fever	June 1	June 15	
40.	Ann Thomas	26	Pneumonic Sympt.	— 4	Sept. 19	
41.	Edward Barry	58	Gastric Symptoms	— 8	July 7	
42.	Grace Smith	21	Simple Fever	— 8	June 18	
43.	John Williams	13	Pneumonic Sympt.	— 8	— 18	
44.	Mary Redcliff	28	Cephalic Symptoms	— 11	July 21	
45.	Eliz. Hagley	21	Gastric Symptoms	— 11	— 26	
46.	Mary Young	15	Simple Fever	— 11	June 18	
47.	Ann Ashmore	21	Cephalic Fever	— 11	Aug. 1	
48.	William Bailey	14	Cephalic Symptoms	— 11	July 30	
49.	Richard Caton	40	Cephalic Symptoms	— 11	June 30	
50.	James Nelson	34	Cephalic Symptoms	— 11	Aug. 18	
51.	Eliz. Clark	14	Simple Fever	— 15	June 10	
52.	Mary Courmell	23	Gastric Symptoms	— 15		June 27
53.	Thomas Smith	26	Cephalic Symptoms	— 25	Aug. 13	
54.	James Hoare	42	Cephalic Symptoms	— 25	July 12	
55.	John Yandell	40	Simple Fever	— 29	— 7	

No.	NAME.	Age.	Character of the Disease.	Entry.	Discharged cured.	Died.
56.	Martha Baker	40	Simple Fever	June 29	Aug. 1	
57.	Samuel Spragne	25	Cephalic Symptoms	— 29	— 8	
58.	Jane Stephens	14	Pneu. & Ceph. Sym.	July 2	— 22	
59.	John Penford	30	Cephalic Symptoms	— 2	July 30	
60.	Joseph Flower	52	Cephalic Symptoms	— 2	Aug. 7	
61.	Mary Venn	23	Cephalic Symptoms	— 7	— 26	
62.	Sarah Davis	16	Enteric Symptoms	— 7		July 20
63.	John Jacobs	52	Cephalic Symptoms	July 7	Aug. 13	
64.	Ann Page		Cephalic Symptoms	— 7	July 21	
65.	Elias Bewston	7	Simple Fever	— 9	— 24	
66.	John Britton	16	Cephalic Symptoms	— 14	Aug. 6	
67.	Helen Quinlan	19	Pneumonic Sympt.	— 14	Mar. 27, 1819	
68.	Kezia Dobbie	22	Simple Fever	— 20	Aug. 5	
69.	Ann Bryant	20	Gastric Symptoms	— 20	April 13, 1819	
70.	Susan Clark	22	Simple Fever	— 20	Aug. 1	
71.	John Harper	16	Simple Fever	— 23	— 2	
72.	Henry Lumber	26	Simple Fever	— 23	— 8	
73.	Ann White	43	Simple Fever	— 23	— 19	
74.	John Bond	22	Cephalic Symptoms	— 28	Sept. 4	
75.	Mary Donovan	24	Cephalic Symptoms	— 28	Aug. 4	
76.	Elizabeth Rogers	20	Pneu. & Ceph. Sym.	— 30	Sept. 16	
77.	George Parker	22	Cephalic Symptoms	— 30	Aug. 8	
78.	John Warr	13	Pneumonic Sympt.	— 30	Oct. 16	
79.	Mary Hillman	26	Simple Fever	Aug. 3	Aug. 24	
80.	Jane King	30	Pneumonic Sympt.	— 3	— 23	
81.	John Owen	22	Cephalic Symptoms	— 6	— 16	
82.	Maria Higgs	27	Simple Fever	— 6	Sept. 6	
83.	Margaret Thomas	24	Cephalic Symptoms	— 6	Aug. 26	
84.	James Thurney	18	Cephalic Symptoms	— 6	Sept. 17	
85.	James Stowell	22	Pneumonic Sympt.	— 6	— 19	
86.	Coru. Brushnaham	7	Typhoid Symptoms	— 10		Aug. 12
87.	Edward Bell	17	Simple Fever	— 10	Aug. 31	
88.	William Hanke	13	Simple Fever	— 17	— 27	
89.	Jemima Melsom	18	Cephalic Symptoms	— 20	Sept. 3	
90.	William Jones	23	Pneumonic Sympt.	— 20	Aug. 29	
91.	Eliz. Llewellyn	21	Pneumonic Sympt.	— 20	Sept. 20	
92.	John Jones	18	Pneumonic Sympt.	— 20		Aug. 29
93.	Robert Whitfield	17	Pneu. & Ceph. Sym.	— 24	— 21	
94.	Julia Sandford	14	Pneu. & Ceph. Sym.	— 24	Oct. 2	
95.	Mary Fenner	40	Typhoid Symptoms	— 24		Sept. 12
96.	Johanna M'Gra	23	Pneu. & Ceph. Sym.	— 24	Sept. 2	
97.	Mary Hodge	22	Cephalic Symptoms	— 26	— 19	
98.	Rachael Harvey	22	Gastric Symptoms	— 31	Oct. 14	
99.	John Jones	25	Simple Fever	Sept. 3	Dec. 5	
100.	Thomas Gage	18	Ceph. & Pneu. Sym.	— 3	Oct. 11	
101.	Henry Hayman	16	Simple Fever	— 7	Sept. 31	
102.	William Williams	12	Pneumonic Sympt.	— 7	— 19	
103.	James Coombs	10	Cephalic Symptoms	— 7	Dec. 29	
104.	Mary Chady	20	Pneu. & Ceph. Sym.	— 7	Oct. 16	
105.	Caroline Litherby	19	Typhoid Symptoms	— 10		Sept. 12
106.	Thomas Richards	19	Pneumonic Sympt.	— 10	— 20	
107.	William Edwards	24	Pneumonic Sympt.	— 10	Feb. 1, 1819.	
108.	Robert Harris	65	Simple Fever	— 14	Nov. 2	
109.	Ann Smart	16	Simple Fever	— 14	Oct. 8	
110.	Cath. Lloyd	23	Cephalic Symptoms	— 14	Nov. 4	
111.	Lucy Williams	25	Enteric Symptoms	— 14		Sept. 16
112.	James Gray	38	Typhoid Symptoms	— 17		— 18
113.	Betsey Chappell	23	Cephalic Symptoms	— 17	Oct. 14	

No.	NAME.	Age.	Character of the Disease.	Entry.	Discharged cured.	Died.
114.	John Brownham	23	Pneumonic Sympt.	Sept. 17		Sept. 26
115.	Sarah Woolf	23	Cephalic Symptoms	— 17	Oct. 14	
116.	John Mason	15	Cephalic Symptoms	— 17	— 16	
117.	William Jones	21	Hepatic Symptoms	— 17	— 10	
118.	Ann Williams	28	Cephalic Symptoms	— 24	— 22	
119.	Aun Gunning	20	Pneumonic Sympt.	— 25	Feb. 15, 1819	
120.	Hannah Matthews	22	Enteric Symptoms	— 28	Oct. 4	
121.	Mary Hale	21	Enteric Symptoms	— 28	— 29	
122.	Luke Smith	17	Ceph. & Enteric S.	Oct. 1		Oct. 9
123.	Mary Dally	23	Pneumonic Sympt.	— 1	Dec. 11	
124.	Elizabeth Jones	18	Simple Fever	Oct. 1	Oct. 5	
125.	Ann George	16	Simple Fever	— 1	— 16	
126.	Jane Beattie	23	Simple Fever	— 5	— 16	
127.	Fanny Newton	40	Hepatic Symptoms	— 5	Nov. 26	
128.	Elizabeth Bicksey	25	Pneumonic Sympt.	— 12	— 7	
129.	William Seager	15	Ceph. & Pneu. Sym.	— 12	Oct. 27	
130.	Hannah Daubeney	18	Pneumonic Sympt.	— 12	Mar. 11, 1819	
131.	Sarah Demnead	19	Cephalic Symptoms	— 15	Oct. 30	
132.	Elizabeth Manning	19	Cephalic Symptoms	— 19	Nov. 17	
133.	Mary Lovell	24	Cephalic Symptoms.	— 19	Jan. 12, 1819	
134.	Edward Waters	18	Pneumonic Sympt.	— 19	Nov. 14	
135.	John Fry	51	Cephalic Symptoms	— 29	— 19	
136.	Elizabeth Richards	22	Simple Fever	— 29	— 19	
137.	Alfred Northmore	20	Gastric Symptoms	— 29	Jan. 7, 1819	
138.	John Harris	12	Cephalic Symptoms	— 29	Nov. 4	
139.	William Dyer	20	Enteric Symptoms	Nov. 2	Dec. 12	
140.	Mary Jones	17	Gastric Symptoms	— 2	— 2	
141.	John Douch	24	Pneumonic Sympt.	— 2	Feb. 6, 1819	
142.	Catherine Allen	23	Pneumonic Sympt.	— 2	Nov. 17	
143.	Charles Williams	20	Pneumonic Sympt.	— 2	— 28	
144.	Fanny Francis	33	Gastr. & Pneu. Sym.	— 5	— 17	
145.	John Prosser	40	Gastric Symptoms	— 5	Jan. 19, 1819	
146.	Hannah Stocker	20	Pneumonic Sympt.	— 5	— 12, 1819	
147.	Ann Lucas	30	Rheumatic Sympt.	— 9	Dec. 31	
148.	Mary Withers	26	Pneumonic Sympt.	— 9	— 12	
149.	Sarah Wood	18	Pneumonic Sympt.	— 9	— 2	
150.	Mary Lake	22	Pneumonic Sympt.	— 12	— 11	
151.	William Cole	18	Gastric Symptoms	— 19	— 23	
152.	Sarah Branch	21	Cephalic Symptoms	— 26	— 28	
153.	Margaret Davis	25	Gastric & Pneum.	— 26	— 31	
154.	William Gillard	26	Cephalic Symptoms	— 30	— 28	
155.	Ann Britton	13	Cephalic Symptoms	Dec. 3	Feb. 27, 1819	
156.	Sarah Metlow	16	Simple Fever	— 3	Dec. 20	
157.	Ann Isles	27	Gastric Symptoms	— 3	— 17	
158.	Ann Baskerville	29	Ceph. & Pneu. Sym.	— 10	Jan. 25, 1819	
159.	William Dunn	9	Ceph. & Pneu. Sym.	— 14		Dec. 16
160.	William Griffith	30	Pneumonic Sympt.	— 14	Mar. 3, 1819	
161.	William Walters	21	Cephalic Symptoms	— 14	Dec. 24	
162.	Jane Day	18	Pneumonic Sympt.	— 17	Jan. 7, 1819	
163.	Mary Martin	10	Cephalic & Gastric	— 25	Feb. 23, 1819	
164.	James Williams	24	Cephalic Symptoms	— 24	Dec. 31	
165.	James Brookson	19	Typhoid Symptoms	— 26		Dec. 30, 1813
166.	Unity Tooze	22	Cephalic Symptoms	— 28	Jan. 18, 1819	
167.	Lewin Allers	21	Simple Fever	— 28	June 24, 1819	
168.	Margaret Reed	27	Cephalic Symptoms	— 31	Aug. 10, 1819	
169.	Mary Trezise	18	Cephalic Symptoms	— 31		Dec. 31, 1816
170.	Ann Biudon	33	Pneumonic Sympt.	— 31	Feb. 23, 1819	
171.	Ann Isles		Simple Fever	— 31	Jan. 23, 1819	

REPORT OF THE INFIRMARY IN-PATIENTS FOR 1819.

No.	NAME.	Age.	Character of the Disease.	Entry.	Discharged cured.	Died.
172.	Rebecca Carr	35	Pneumonic Sympt.	Jan. 4	Jan. 21	
173.	Nathaniel Hillman	15	Ceph. & Pnen. Symp.	— 4	Feb. 3	
174.	Mercy Curtis	30	Simple Fever	— 7	Jan. 12	
175.	Thomas Smith	40	Pneumonic Sympt.	— 14	April 14	
176.	John Bottons	36	Cephalic Symptoms	— 14	— 15	
177.	George Rapson	45	Pneumonic Sympt.	— 18	Feb. 2	
178.	Charlotte Ellis	22	Pneumonic Sympt.	— 18	Mar. 10	
179.	Lucy Williams	40	Enteric Symptoms.	— 21	— 16	
180.	Peggy Harding		Pneumon. & Gastric	— 21	May 20	
181.	Rachel Howell	30	Pneumonic Sympt.	— 21	Mar. 11	
182.	Robert Morgan	40	Pneumonic Sympt.	— 21	— 20	
183.	James Colstone	17	Pneu. & Rheum. S.	— 21	— 23	
184.	Mary Yeatman	19	Pneumonic Sympt.	— 25	— 4	
185.	Mary Freeman	20	Cephalic Symptoms	— 27		Feb. 23
186.	Ann Edwards		Cephalic Symptoms	— 27	Feb. 26	
187.	Sarah Thomas	18	Pneumonic Sympt.	Feb. 4	— 19	
188.	Thomas Cate	10	Cephalic Symptoms	— 8	Mar. 9	
189.	Ann Cate	34	Pneumonic Sympt.	— 8	— 16	
190.	Sarah Mortimer	25	Simple Fever	— 8	Feb. 22	
191.	Evan Griffiths	22	Pneumonic Sympt.	— 10	Mar. 4	
192.	Ann Rogers	4	Gastric Symptoms	— 10	April 22	
193.	William Taylor	21	Simple Fever	— 15	Mar. 9	
194.	Mary Morgan	22	Pneumonic Sympt.	— 18	— 9	
195.	Mary Horner	38	Simple Fever	— 18	— 8	
196.	John Newell	21	Cephalic Symptoms	— 18	Feb. 25	
197.	Ann Edmonds		Pneumonic Sympt.	— 18	Mar. 20	
198.	William Tucker	22	Cephalic Symptoms	— 22	May 21	
199.	Elizabeth Davis	17	Pneumonic Sympt.	— 25	Mar. 18	
200.	Elizabeth Parry	22	Simple Fever	— 25	April 6	
201.	Ann Wooton	25	Ceph. & Pnen. Sym.	— 27	Mar. 16	
202.	Bridget Neagle	40	Rheumatic Sympt.	Mar. 4	Sept. 14	
203.	Fanny Day	19	Pneumonic Sympt.	— 4	Mar. 21	
204.	Rachael Young	28	Gastric Symptoms	— 4	— 26	
205.	Ann Davy	25	Cephalic & Pnem.	— 4	April 8	
206.	Jane Williams	50	Pneumonic Sympt.	— 6	Mar. 20	
207.	Arthur Hief	34	Cephalic Symptoms	— 8	— 16	
208.	John Hain	31	Cephalic Symptoms	— 8	April 12	
209.	Elizabeth Bamfield	13	Cephalic Symptoms	— 8	— 8	
210.	Charlotte Jackson	25	Ceph. & Pneu. Sym.	— 10	Mar. 20	
211.	Johanna Nugent	17	Ceph. & Pneu. Sym.	— 11		Mar. 15
212.	Sarah Noble	28	Cephalic Symptoms	— 11	April 7	
213.	Sarah Horner	15	Simple Fever	— 15	— 25	
214.	John Bowles	20	Dysenteric Sympt.	— 15		April 14
215.	Michael Collar	19	Gastric Symptoms	— 15	— 10	
216.	Charlotte Pittard	23	Pneumonic Sympt.	— 16	— 4	
217.	Marg. Perryman	25	Pneumonic Sympt.	— 18	July 16	
218.	John Bidgood	36	Simple Fever	— 18	April 8	
219.	Thomas Williams	20	Simple Fever	— 18	— 5	
220.	Joab Edmonds	50	Enteric Symptoms	— 20	— 11	
221.	Elizabeth Washer	12	Cephalic Symptoms	— 22	May 22	
222.	Maria England	25	Pneumonic & Gastr.	— 22	April 22	
223.	Ann Prosser	22	Cephalic & Pneum.	— 22	Sept. 6	
224.	David Jones	22	Gastric Symptoms	— 25	May 10	
225.	Ann Hogan	25	Pneumonic Sympt.	— 25	April 20	
226.	Joseph Webb	21	Cephalic Symptoms	— 25	June 6	
227.	Selah Cheshire	3	Simple Fever	— 25	April 22	
228.	Mary Thomas	19	Cephalic Symptoms	— 29	May 3	

No.	NAME.	Age.	Character of the Disease.	Entry.	Discharged cured.	Died.
229.	William Bright	19	Cephalic Symptoms	Apr. 1	May 2	
230.	Betty Penfit	33	Simple Fever	— 1	— 5	
231.	William Howard	23	Cephalic Symptoms	— 1	April 22	
232.	Sophia Ambling	23	Gastric Symptoms	— 7	— 20	
233.	Le Conuelli	30	Pneumonic Sympt.	— 8	— 20	
234.	Patrick Wall	30	Cephalic Symptoms	— 10	— 24	
235.	George Dickson	20	Enteric Symptoms	— 10	May 20	
236.	Hannah Bird	23	Gastric & Diarrhœa	— 19	— 31	
237.	John Handy	27	Pneum. & Diarrhœa	— 22	— 4	
238.	Hannah Parker	21	Simple Fever	— 22	— 2	
239.	Elizabeth Cole	19	Enteric Symptoms	— 22	— 17	
240.	William Prosser	27	Cephalic Symptoms	April 27	May 31	
241.	James Coghlan	14	Cephalic Symptoms	— 27	— 15	
242.	Eliz. Keene	22	Cephalic Symptoms	— 27	— 7	
243.	Jos. Meads	45	Cephalic Symptoms	— 27	— 23	
244.	Thomas M'Mara	23	Cephalic Symptoms	— 27		May 9
245.	Robert Jefferies	19	Simple Fever	— 27	— 23	
246.	Jane Willshire	20	Pneumonic Sympt.	— 28	— 23	
247.	Mary Nichols	48	Cephalic Symptoms	— 29	June 4	
248.	Charles Wells	43	Pneumonic Sympt.	May 3	— 26	
249.	Ellen Nagle	10	Pneumonic Sympt.	— 6	— 7	
250.	Hannah Bunn	19	Cephalic Symptoms	— 6	May 22	
251.	Mary Smart	26	Cephalic Symptoms	— 6	June 5	
252.	George Harris	28	Rhenmatic Symptoms	— 6	July 29	
253.	Ann Jones	20	Cephalic Symptoms	— 6	May 22	
254.	Eliz. Paisley	24	Cephalic Symptoms	— 6	June 12	
255.	Fanny Tripp	14	Cephalic Symptoms	— 6	May 13	
256.	Mary Harris	22	Pneumonic Sympt.	— 10	June 20	
257.	Cath. Galloway	35	Typhoid & Delirium	— 10		May 11
258.	Ann Collins	52	Gastric Symptoms	— 13	June 11	
259.	James Oldfield	19	Pneumonic Sympt.	— 13	May 31	
260.	John Thomas	24	Cephalic Symptoms	— 17	June 16	
261.	Charles Totterdale	18	Ceph. & Pneu. Sym.	— 20		
262.	Susan Evans	16	Simple Fever	— 20	June 14	
263.	Mary Sayer	14	Simple Fever	— 20	May 28	
264.	Eliz. Boord	17	Cephalic Symptoms	— 21	— 28	
265.	William Randall	41	Cephalic Symptoms	— 27	June 28	
266.	James Adlam	45	Gastric Symptoms	— 27		
267.	Ann Llewelin	30	Cephalic Symptoms	— 27	July 22	
268.	Henry Denny	52	Pneumonic Sympt.	June 3		June 3
269.	Mary Burchal	32	Pneumonic Sympt.	— 3	Aug. 14	
270.	John Skinner	21	Pneumonic Sympt.	— 7	— 4	
271.	Ann Eames	50	Cephalic Symptoms	— 11		June 12
272.	Jos. Daniel	14	Gastric Symptoms	— 11	July 18	
273.	James Curry	19	Simple Fever	— 10	Aug. 12	
274.	Thomas Jones	17	Cephalic Symptoms	— 10	— 16	
275.	Charles Hatton	19	Simple Fever	— 13	July 1	
276.	Pat. Nowlan	35	Cephalic Symptoms	— 13	— 12	
277.	Thomas Strong	12	Pneumonic Sympt.	— 17	— 9	
278.	Sarah Whitele	17	Diarrhœa	— 17	Sept. 14	
279.	Mary Greenslade	35	Pneumonic Sympt.	— 21	July 6	
280.	Edward Rosewane	35	Cephalic Symptoms	— 23	Aug. 5	
281.	Edward Snow	24	Cephalic Symptoms	July 1		July 3
282.	James Smart	31	Gastric Symptoms	— 5	Aug. 2	
283.	Sarah Wassel	22	Cephalic Symptoms	— 8	Oct. 12	
284.	Eliz. Adams	30	Pneumonic Sympt.	— 8	Aug. 8	
285.	Mary Isaac	26	Pneumonic Sympt.	— 8	— 9	
286.	Flower Clark	21	Pneu. & Ceph. Symp.	— 8	— 7	

No.	NAME.	Age.	Character of the Disease.	Entry.	Discharged cured.	Died.
287.	Eliz. Dayer	11	Simple Fever	July 12	Aug. 16	
288.	Nich. Harrison	40	Cephalic Symptoms	— 15	— 14	
289.	Fanny Powell	23	Cephalic Symptoms	— 19	— 3	
290.	Charlotte Ellis	22	Diarrhœa	— 19	— 24	
291.	William Parish	30	Pneumonic Sympt.	— 22	Oct. 25	
292.	Samuel Smith	19	Gastric Symptoms	— 29	— 18	
293.	James Rowly	12	Cephalic Symptoms	— 29	Aug. 13	
294.	John Hicks	23	Cephalic Symptoms	Aug. 2	— 14	
295.	Ann Harding	30	Cephalic Symptoms	— 4	Oct. 12	
296.	William Walker	15	Simple Fever	— 5	Aug. 20	
297.	Hannah Reeves	18	Cephalic Symptoms	— 5	Sept. 3	
298.	Fred. Millard	22	Simple Fever	— 9	Aug. 28	
299.	William Boyd	40	Pneumonic Sympt.	— 9	— 24	
300.	Jean Macheaux	21	Pneumonic Sympt.	— 12	— 21	
301.	Anne Burchell	20	Simple Fever	— 12	— 27	
302.	Maria Wallis	19	Cephalic Symptoms	— 12	— 30	
303.	James Blakemore	32	Cephalic Symptoms	— 12	— 31	
304.	Samuel Bayley	23	Cephalic Symptoms	— 16	— 24	
305.	James Morgan	19	Ceph. & Diarrhœa	— 19	Sept. 1	
306.	William Cambley	23	Cephalic Symptoms	— 19	Aug. 28	
307.	Anne Thomas	27	Cephalic Symptoms	— 23	— 30	
308.	Hannah Penny	15	Pneumonic Sympt.	— 31	{ Relieved Nov. 9	
309.	Ruth Sibbens	23	Gastric Symptoms	Sept. 2	Sept. 30	
310.	Cyrus Hewlett	29	Pneumonic Sympt.	— 2	Oct. 12	
311.	Eliz. Baldwin	18	Simple Fever	— 6	Sept. 9	
312.	Phil. Gomond	28	Simple Fever	— 7	— 20	
313.	Eliz. Mortimer	35	Simple Fever	— 9	Nov. 2	
314.	Mary Naplin		Enteritic	— 9	Oct. 1	
315.	Jos. Shephard	29	Pneumonic Sympt.	— 13	— 22	
316.	John Newbury	73	Enteric Symptoms	— 13	— 19	
317.	John Bricklow	8	Rheumatic Symptoms	— 13	Sept. 24	
318.	Jane Osborn	22	Cephalic Symptoms	— 13	Nov. 1	
319.	George Hampton	21	Rheumatic Symptoms	— 15	Oct. 21	
320.	Anne Harding	25	Gastric Symptoms	— 15	— 18	
321.	Chas. Humphries	32	Pneumonic Sympt.	— 20	— 14	
322.	William Hard	22	Cephalic Symptoms	— 23	Nov. 6	
323.	Susan Hall	29	Cephalic Symptoms	— 30	— 22	
324.	Mary Millet	31	Cephalic Symptoms	— 30	— 2	
325.	Samuel Sturge	13	Cephalic Symptoms	— 30	Oct. 30	
326.	Mary Davis	30	Simple Fever	— 30	Nov. 7	
327.	Eleanor Payne	16	Pneumonic Sympt.	Oct. 1	— 9	
328.	Eleanor Tomkins	19	Enteritis	— 7	— 6	
329.	William James	25	Pneumonic Sympt.	— 7	Oct. 18	
330.	Eliz. Smith	15	Cephalic Symptoms	— 11	— 28	
331.	Abimelech Clark	22	Cephalic Symptoms	— 14	Nov. 3	
332.	Hans Radsen	25	Cephalic Symptoms	— 18	— 11	
333.	Mary Peters	20	Pneumonic Sympt.	— 25	— 13	
334.	James Nash	21	Pneumonic Sympt.	Nov. 4	Dec. 6	
335.	Jos. Howell	27	Pneumonic Sympt.	— 4	Nov. 30	
336.	Jane Jones	34	Cephalic Symptoms	— 8	Dec. 1	
337.	Fanny Powell	23	Cephalic Symptoms	— 9	— 1	
338.	John Mitchan	11	Ceph. & Pneu. Symp.	— 18	— 9	
339.	James Tennis	58	Ceph. & Pneu. Symp.	— 18	Cured.	
340.	James Baker	32	Ceph. & Pneu. Symp.	— 22	Convalescent in the house.	
341.	Mary Tegnter	18	Ceph. & Pneu. Symp.	— 26	Jan. 4, 1820	
342.	George Burchell	16	Cephalic Symptoms	— 27	In the house convalescent.	
343.	Abigail Welch	15	Cephalic Symptoms	— 29	Dec. 10	

No.	NAME.	Age.	Character of the Disease.	Entry.	Discharged cured.	Died.
344.	William Power	26	Pneumonic Sympt.	— 29	In the house	convalescent.
345.	Jas. M'Ganrick	38	Pneu. & Ceph. Sym.	— 30	Dec. 2	
346.	John Downs	44	Ceph. & Pneu. Sym.	Dec. 2	Dec. 24	
347.	Robert Fenly	32	Pneu. & Ceph. Sym.	— 2	In the house	convalescent.
348.	Mary Treganning	33	Cephalic Symptoms	— 6	Dec. 11	
349.	Martin Goldworthy	25	Pneumonic Sympt.	— 6	In the house	convalescent.
350.	Eliz. Waitworth	23	Cephalic Symptoms	— 6	Ditto.	
351.	Michael Leghoe	22	{ Ceph. Congestion & postea Pneu. Sym. }	— 16	Ditto.	
352.	Isaac Chileolt	50	Pneu. & Ceph. Sym.	— 16	Ditto.	
353.	Lucy Evans	23	Ceph. & Pneu. Sym.	— 23	In the house.	
354.	Sarah Child	18	Cephalic Symptoms	— 23	Ditto.	
355.	John Griffith	24	Ceph. Congestion	— 23	Ditto.	
356.	William Jones	35	Gastric & Cephalic	— 23	Ditto.	
357.	John Thomas	27	{ Ceph. Congestion & Pneu. Sympt. }	— 27	Ditto.	
358.	Mary Lewis	25	Cephalic Symptoms	— 29	Ditto.	
359.	Mary Shates	17	Pneu. Sym. & Enter.	— 30	Ditto.	

The total number of In and Out patients during the whole period from July 1817, to December 1819 inclusive, is, as before mentioned, 647.

During the years 1818 and 1819, the total number is 575; and the deaths in the same period, among the In-patients, which probably comprised the whole number of fatal cases, were as follows :

	In-patients.	Out-patients.		Deaths.
In 1818 - - -	172	+ 112	=	284 16
In 1819 - - -	198	+ 95	=	291 8

During the last year the proportion of mortality in the Infirmary has, therefore, amounted to 8 in 291, or about 1 in 37, which is much below the usual average of Fever Hospitals. It is, indeed, possible, that some fatal cases may have occurred among the Out-patients; but this, from the circumstance before mentioned, is very improbable.

It may be remarked, that the average mortality, during 1818, is much greater than during 1819: and this was the case in the Report of St. Peter's Hospital. This circumstance admits of the same explanation in both instances; from the greater

number of distressed vagrants, who; during the former year, were wandering about in a diseased state, until they were brought into hospitals in a state of extreme exhaustion. That the principal number of fatal cases in the Infirmary occurred among persons introduced in the last stage of disease, is evident on comparing the dates of their admission with those of their death. It will be seen that most expired within two or three days from the time when they were brought into the house.

SECTION IV.

*Observations on the Symptoms, Pathology, and
Medical Treatment of Fever.*

As this work is not intended for a systematic treatise on Fever, and as every thing which the most minute and accurate observation can furnish towards the description of this disease in its ordinary phænomena, may be found in the numerous books, both old and recent, which are already well known, I shall not exhaust the patience of my readers, or waste my own time by enumerating the symptoms which accompany the usual course of this disorder. I shall confine myself, on the present occasion, to some remarks on the circumstances which have most strongly attracted my attention, and appear to me the most important with respect to Pathology. To these I shall add a brief account of the medical treatment that has been found, in the hospitals

with which I am concerned, to be the most efficacious in shortening the disease, or mitigating its violence. I may, on this occasion, be permitted to observe, since such a pretension seems to be required when a statement of any method of practice is laid before the public, that the treatment I have to describe has in its favor the most decisive testimony, viz. that of a very favorable result; the average number of deaths in the foregoing records of cases being very small, when due allowance is made for circumstances, and the instances in which the disease was cut short in its early stage very numerous.* The regimen here pursued has been the simple result of experience and observation, uninfluenced by any predilections arising from theory or systematic

* Some idea of the number of cases cut short, may be formed by examining the dates of Entry and Discharge in the Report of St. Peter's Hospital. It will be seen that a considerable proportion of the cases were retained under treatment in the fever ward only a few days. In the Infirmary Report, the same estimate cannot be formed, because it has been customary to keep convalescents for some time in the house.

principles. The measures laid down were only gradually adopted ; they were at first entered upon with caution and timidity, and practised only by halves : they were pursued to a greater extent when repeated trials had produced confidence in their safety and advantage, and had gradually dissipated the fears and prejudices at first entertained.

That the derangement of the system of functions which constitutes fever, is very nearly allied in its nature to the disease which accompanies the inflammation of particular organs, is an opinion which is gaining ground every day among medical practitioners. It is, indeed, very remarkable, that they have been so long in arriving at it, when we consider the striking analogy in the phænomena of these distempers. Fever of almost every type and variety is occasionally imitated so closely by morbid states that occur in the phlegmasiæ, that it is sometimes necessary to make a diligent enquiry into circumstances, in order to distinguish them. It was long ago remarked by an eminent practical writer,

that there is no one pathognomic symptom by which fever, properly so called, may be discriminated.*

Whether fever and inflammatory disease are identical, in respect to the disordered action which constitutes them, will be rather a matter of curiosity than of useful inquiry, so long as we remain ignorant in what inflammation really consists. While one party of physiologists declare that inflammation is increased action of the arteries, and another that it is diminished action, while a third avers that the arteries are never capable of any action at all—we cannot hope to throw much light on the nature of fever, even if we could prove that fever is inflammation. But the fact that these diseases are nearly allied, and that the former is very often productive of the latter, is of great practical importance, since we happen to understand more fully than most other parts of medical practice, how to treat inflammatory disorders. And the fact I have just alluded to, must be allowed without controversy, by every person who

* Dr. G. Fordyce's *Essays on Fever*.

is possessed of competent knowledge. Fever is only dangerous when it gives rise to, or displays the symptoms of visceral inflammation.

In that milder form of the disease which is termed simple fever, there is no certain proof of any local inflammation. The blood, however, when drawn, even under these circumstances, often exhibits, as it was observed by Sydenham, the inflammatory crust; the state of the secretions is similar to the condition they assume in the phlegmasiæ; the relief also which is produced by venesection, and by other evacuations, tends to prove, that the disease is in its nature analogous to these distempers. But this milder species is ever liable to be converted into a severer fever, exhibiting both in the living and the dead body unequivocal marks of inflammation in the brain, the lungs, the liver, stomach, or bowels. Simple fever most naturally, and frequently degenerates into cephalic: indeed the cases to which these names are respectively applied, are only distinguished by the different violence in the symptoms; the head is more or less affected with pains, and other disor-

ders, in both cases : the seat of these in the more severe form, seems to be the membranes of the brain ; and to the same parts, as well as to the coverings of the nerves, we may, with great probability, ascribe the pains in the head and limbs, which attend the first attack of almost every case of fever.

Simple and cephalic fever may therefore be considered as the genuine forms of this disease, the attack being milder in the first, and more severe in the second. The pneumonic, hepatic, gastric, enteric, and rheumatic forms may be regarded as varieties.

The following observations on the treatment of fever, refer, in the first instance, to the simple and cephalic forms. I shall afterwards notice the modifications of practice required in the varieties.

In a considerable proportion of the patients affected with fever, who were admitted into St. Peter's Hospital, and in many of those who were brought into the Infirmary, the disease was still in its first stage, or in the period of depressed vital action. The cold stage indeed often seemed to have been protracted beyond its

usual duration in vagrants and other paupers, in consequence of exposure to cold and damp winds, by lying during wet nights on the sides of roads, or in other unsheltered places, and by the want of all sustenance and means of restoring warmth and the vigour of the circulation. I have frequently seen poor wretches brought into the Hospital, after having been exposed to such circumstances, in whom the symptoms of the cold stage had continued many days without any appearance of re-action. Though in an advanced stage of disease, they had never experienced the hot fit, or the return of arterial energy: their pulse was feeble and depressed, their extremities cold, and their skin clammy. Sometimes they were found nearly naked and half starved, and covered with every species of filth and vermin; in such a state of wretchedness and exhaustion, that their aspect seemed to preclude all hopes of recovery. Occasionally they sunk, in spite of all efforts to restore warmth and animation: in other instances, re-action, when it at length took place, was extremely violent, and produced a high degree of inflammation in some of the viscera,

which occurring as it did in habits previously exhausted, and unable to sustain its violence, speedily terminated in effusion, suppuration, or gangrene, and in death.

The first measure that was generally adopted with patients admitted under such circumstances, was to strip them, and put them into a warm bath, their hair being at the same time cut off, and their heads shaved. While in the bath they were directed to be well rubbed, for the double purpose of cleansing the body and restoring the circulation of blood in the surface and extremities. After this process was completed, they were rubbed dry, and put into a dry and clean bed. A draught of some warm fluid was then given, which was generally thin gruel. In some instances, where the exhaustion was great, and the circulation not easily restored, a little wine was added to the gruel; but this was done only when extreme necessity demanded it, and with great caution and reluctance.

The majority of cases were not in such extreme circumstances. In general there was enough strength remaining to sustain without peril the action of vomiting. When

this appeared to be the state of the patient, a gentle emetic dose was given to him, as soon as he came out of the warm bath, consisting of the powder of ipecacuanha, with or without an addition of tartarized antimony. By these means the powers of life were generally roused, and the hot stage brought on, often in a mitigated form. In a few cases the emetic cut short the complaint.

The foregoing description applies more particularly to the cases of vagrants who were brought into St. Peter's Hospital; though some patients in a similar condition were occasionally admitted into the Infirmary. The persons received into the latter house were commonly in a less abject plight, though many of them had been neglected until a late period of the disease. In those cases that were admitted before the stage of re-action had taken place, the means above mentioned were adopted.

It was during the first accession of the hot fit, that the chief attempts were made to subdue the disease by breaking through the train of morbid actions. The symptoms were now a full, bounding pulse, a hot, dry

skin, a parched, white, furred tongue, soon changing to a browner hue, with intense thirst, and more or less of nausea; great anxiety and restlessness; often a dry cough, with some degree of dyspnœa. The patient complained of pains in the back and limbs; general soreness; constant tossing from side to side, without experiencing the relief expected from change of posture. But the part chiefly affected was generally the head; the carotid and temporal arteries pulsated strongly; a dull oppressive pain was felt across the temples, and often severe shooting pains through the head.

This state of the disease was almost uniformly relieved, by taking a moderate portion of blood from the arm. The quantity abstracted was various, according to circumstances, but it generally happened that a disposition to syncope supervened, sooner than it would have done in a person of the same age and constitution, labouring under pneumonic inflammation of the ordinary character. From ten to fourteen ounces may be stated as the average of the quantity that was taken at the first bleeding, but not unfrequently sixteen or twenty

ounces had flowed before the wished-for effect began to display itself. When no particular circumstance in the age or constitution of the patient, or in the character of the symptoms, seemed to render such a measure hazardous, it was generally desired to bring on a degree of relaxation approaching to syncope, before the flow of blood was stopped. When this occurred soon in a pretty complete degree, and accompanied with vomiting, a surprising degree of relief was in almost every instance experienced.

As soon as the pulse became perceptibly reduced in strength, or in frequency, and the patient became sick or faint, his arm was tied up. Sleep very frequently followed; and a partial, or sometimes a complete remission of the symptoms.

The use of the lancet was not limited to those cases in which the pulse was full and strong. When the other conditions above mentioned pointed out the propriety of bleeding, it was done, although the pulse was feeble and oppressed, unless any particular symptom forbid. It was often observed under these circumstances, that the

pulse rose considerably as the blood flowed. It sometimes happened that the blood was thin in its consistence, and scarcely separated in the first vessel in which it was received: in the others, or at a subsequent venesection, it assumed the buffy coat, and afterwards displayed the signs of a high degree of inflammation.

In many instances the patient was found, after the lapse of ten or twelve hours, to have experienced only a partial or temporary relief from the first venesection; the headach returned; sometimes with increased violence, and the other symptoms in the same proportion. In such instances the abstraction of blood was repeated; and if the same necessity existed, it was adopted a third or fourth time, either from the arm or the temporal artery. In persons of weak habits, or much exhausted, and in children under ten years of age, instead of bleeding from the arm or temporal artery, leeches were applied to the head. This was often ordered to be done in more robust persons, when the local affection continued after what was judged to be a sufficient employment of general bleeding.

In a large proportion of those cases marked Simple Fever in the foregoing reports, venesection was employed once. In these instances, when it was adopted within four or five days from the commencement of the disease, it was generally effectual. When the disorder was more advanced, and had assumed the more severe form, or when it had begun with such a degree of violence as to fall under the distinction of Cephalic fever, three or four bleedings were requisite to reduce the symptoms; and this may be set down as the average number of bleedings adopted in the cases marked cephalic in the registers.

At the same time, other means of reducing arterial action were conjoined with the use of the lancet. The head was always shaved. The body was sponged with cold water to prevent the accumulation of heat: the head was kept covered with cloths frequently wetted in cold water.

In some cases of simple fever, when they came under medical treatment at the commencement, the cold affusion was tried. When there was any severe affection of the head it seemed to be of little service; and

in general, it was found that the constant application of wet cloths, or frequent sponging, was a more efficacious method of abstracting heat.

The medicines administered at the same time were chiefly purgatives. Five, six, or eight grains of calomel, with a moderate portion of jalap, when the stomach was not irritable, were first given; if there was nausea and sickness, the calomel was ordered alone, or in pills with the compound extract of colocynth. This dose was followed by a purgative draught of infusion of senna with sulphate of magnesia, which was repeated every third, fourth, or sixth hour, according to the effect produced. The doses of calomel were afterwards repeated, without the powder or extract; the patient was freely purged for several days, and a very open state of the bowels maintained through the whole course of the disease.

Such were the measures almost uniformly pursued in cases of simple or cephalic fever, which were submitted to medical treatment within a few days after the first attack, or soon after the disease had be-

come completely formed. The safety and propriety of this proceeding has been established by the most unequivocal results of experience. In almost every instance of the description above alluded to, when the constitution of the patient was not impaired by habits of intemperance, or by other causes productive of chronic maladies, the disease was speedily disarmed by these measures, of its violence and danger. In a very large proportion of cases it was immediately cut short; and when this did not happen at once, its influence on the constitution was so much reduced, that the symptoms continued gradually to decline, and the patient generally became convalescent in the space of eight or ten days.

When the approach of the disease was more gradual, and it acquired a firm hold on the constitution, without any such strongly marked symptoms of depression, and subsequent re-action, the attempts to arrest or interrupt its course were seldom found to be successful. The measures adopted in these instances were directed by circumstances. The general indication followed was to reduce the symptoms as

much as possible, without too much exhausting the patient. When the affection of the head was considerable, general or local bleeding was prescribed; the head, as in the cases formerly described, was shaved; and it was covered, if necessary, with cold wet cloths. Blisters were occasionally applied to the nape of the neck. The medicines given were the same as before mentioned. In general, cases of this description were soon deprived of their violence, but they were much more obstinate and protracted than those which commenced in a different way.

In cases complicated with inflammation of the thoracic or abdominal viscera, the practice adopted was modified by the particular indications arising from the local disease.

In a considerable number of cases, chiefly in those which occurred during the colder months, or in the variable weather of the spring, the symptoms of pneumonic inflammation were superadded to those of fever, and this disease was much more fatal than simple or cephalic fever.

In disorders of this character, the quan-

tity of blood taken was often larger than in the cases above described, and the necessity of speedily having recourse to the lancet was more urgent. The blood more generally exhibited the buffy coat, or if this did not appear in the quantity first drawn, it was commonly observed at the second or third venesection. Blisters were frequently applied to the sides or sternum.

The most difficult cases to manage, and the most speedily fatal were those instances of fever in which this disease was combined with gastric inflammation, or in which the mucous coat of the intestines was the seat of morbid affection. Gastric inflammation occurred chiefly during the summer months: it was combined with more or fewer of the symptoms of cholera: as the autumn proceeded, these gave place to a more severe diarrhœa and dysentery.

The cases of the former class were marked by tension of the epigastrium and abdomen which were pained on slight pressure; attended with obstinate vomitings. The matter ejected was often bile, and the same fluid found its way in some instances into the blood-vessels, and tinged the skin, and

the tunica conjunctiva of the eyes with a deep yellow suffusion. The tongue was moist and clammy, and covered with a furr of a brown or blackish colour. The bowels were generally very loose. In the cases which occurred late in the autumn, and towards winter, one of the most prominent symptoms was diarrhœa, accompanied with tenesmus, the evacuations consisting of mucus, and afterwards becoming tinged with blood. In those who died with this disease, and whose bodies were examined, the inner coat of the intestines was found abraded, and sometimes extensively ulcerated. In one case which has been noticed in the Report of St. Peter's Hospital, the liver also was the seat of extensive suppuration.

The inflammatory diathesis was subdued in general by the abstraction of smaller quantities of blood in the modifications of fever just described, than in the cases attended with pneumonic or cephalic symptoms: the blood, however, when drawn, was generally covered with the buffy coat. One venesection was often sufficient. This was generally followed by the application of leeches to the epigastrium, or to any

part of the abdomen that was the seat of pain or great uneasiness on pressure. A warm bath was prescribed at the same time, and fomentations to the abdomen. If pain seemed to take a permanent hold of one particular spot, blisters were applied. The irritation of the stomach was diminished by effervescing draughts frequently repeated; to which a few drops of the tincture of opium were sometimes added. But a more effectual relief was generally obtained by a few doses of calomel, containing five or six grains, in pills, combined with some of the resinous cathartics, or followed by a dose of oleum ricini, or the infusion of senna with sulphate of magnesia, and repeated at the interval of six or eight hours. When the lower bowels were chiefly affected, laxative glysters were injected, and sometimes alternated with anodyne enemata, containing from forty to sixty drops of the tincture of opium.

This may suffice for a brief outline of the mode of treatment adopted in cases of fever, which were admitted into the Hospital or Infirmary during the early stage. But a great number of patients had been

neglected, as it has been before mentioned, during the early period, and were admitted in a very different state from that above described. In these cases similar indications of cure were followed, but they were modified according to the particular condition of the patient. I shall conclude with a brief account of the measures adopted in the latter instance.

Cases of cephalic fever, and probably many which in the commencement might rather have been termed simple fever, but which had been suffered to go on to the third or fourth week without the abstraction of blood, or other necessary evacuations, more especially if, as it often happened, the patient had been confined to a close and foul apartment and improperly stimulated, were generally found to display typhoid symptoms, or to have become cases of typhus gravior. Individuals who had been subjected to these circumstances, were often brought into the Hospital, in a state of stupor or delirium, their eyes suffused, their tongues covered with a dry and dark brown crust, and their teeth with sordes,

their skin hot and parched, and beset with petechiæ.

Patients labouring under symptoms of this description were treated in the following manner:—Their heads were immediately shaved; they were put into a tepid bath, and their skin rubbed. After this process was completed, it was often found that if the pulse had been previously feeble and contracted, the flow of blood to the extremities had become more free and general; if the pulse had been hard, full and tense, it was frequently rendered softer, more compressible, and less frequent. The use of the bath was occasionally repeated, and during the subsequent course of the disease, the temperature of the skin was kept at a moderate rate by frequent sponging with cold or tepid water, with which vinegar was sometimes mixed. Sometimes a warm shower bath was used instead of immersion. By these measures the state of the patient was much improved; the sensibility was restored, and the petechiæ often disappeared in a short time.

Whenever there was delirium, or any

considerable tendency to it, or to other affections of the head, the abstraction of blood was ordered, provided that the state of the circulation, particularly the degree of pulsation in the carotid and temporal arteries, was such as to authorize this measure; and if the action of these vessels was strong, a feeble pulse at the wrist was not considered a reason for abstaining from venesection. The blood was drawn from the temporal artery, or from a vein in the arm, and the quantity was determined by the previous circumstances, and by the effect produced on the pulse. The benefit that resulted from such an evacuation, often exceeded the most sanguine hopes. In the course of twenty-four hours, the patient was sometimes found to have passed from a complete typhomania, and an almost total unconsciousness of external impressions, to a tolerably perfect possession of his faculties.

After one bleeding, under circumstances such as I have described, to the amount of twelve or fourteen ounces, or in some severe cases to a larger quantity, the state of the patient was generally found in the

course of ten or twelve hours to be materially improved. Yet the pulse was very often increased in fulness and strength, the skin was extremely hot, or disposed to become so, with a general increase of what is termed reaction, the delirium continuing; though generally in a degree more or less mitigated. In this state of things, the bleeding was generally repeated, and the quantity taken was often greater than at first; while the effect of its abstraction in reducing the pulse at the time was less considerable in proportion. The subsequent proceeding was governed by the result of these measures. If the same indications existed, a third venesection was ordered. It generally happened that two or three bleedings were sufficient to reduce the circulation through the brain, within limits compatible with the safety of its functions; but cases have occurred in which four, or even five, bleedings were adopted with manifest necessity, and with the effect of restoring the patient, and putting him into a state approaching to convalescence. When the symptoms of severe disease were not subdued by these means, under such

circumstances as I have indicated, it was almost uniformly proved by examination after death that the brain had suffered irreparable injury.

In very debilitated and exhausted subjects, when it was judged unsafe to open a blood-vessel, leeches were applied to the head, and a blister to the occiput or nape. The same applications were made in other cases, after general bleeding had been premised and carried as far as it was judged expedient, without completely removing the disorder of the head.

The medicines given at this period of the disease were chiefly calomel and mild laxatives, and the first object aimed at was to clear the bowels of irritating sordes. A dose of calomel, containing five, six, or sometimes even ten grains, was followed after two or three hours by a draught of infusion of senna with half an ounce of sulphate of magnesia : the dose of calomel was repeated after six hours, unless the effect was too considerable to be persisted in, in which case it was diminished. If the infusion of senna was offensive to the stomach, the sulphate of magnesia was given,

dissolved in the infusion of roses. The bowels were kept open by laxatives of this description, as long as the disease continued.

The immediate effect of calomel upon the excretions was considered as a most important result of its use, but it was not the only one which was deemed a favourable indication. When it affected the constitution in that way which is manifested by soreness of the gums, and a *disposition to* ptyalism, it was in a majority of cases found that a gradual remission of the most formidable symptoms had taken place; the secretions became more copious, and more natural in appearance; the alvine discharge of a better colour; the skin softer and more perspirable. The most evident indication of the beneficial effect of this practice, was an alteration in the appearance of the tongue. The dry brown crust was observed gradually to clear away from the edges, which became red and moist as soon as the mercurial action was established, and the whole surface assumed its natural appearance. If this favourable alteration did not happen when the signs of ptyalism came on, it was generally evinced in the

sequel that some severe and irremediable disease had taken place in the lungs or the viscera of the abdomen.*

When the bowels were easily affected, and were unable to bear the doses of calomel above mentioned, without too much purging, it was sometimes joined with moderate portions of opium, or rather of Dover's powder. When the secretions of the intestinal canal are tolerably free, it appears that this addition may be made with advantage; particularly in cases of great general irritability, attended with preternatural acuteness of sensation, such as the long want of sleep is apt to induce; with tremors of the muscles and tendons, and a furred, but moist and tremulous tongue. These are among the symptoms indicating

* I must avow that subsequent experience has by no means confirmed an observation which I formerly made, and which has been repeatedly made by other physicians, that those patients are safe in whom mercury had produced the effect of ptyalism. On the contrary, I have seen many patients fall victims to fever, whose mouths had been made sore by calomel. The cases however, which terminated fatally under such circumstances, were of the description defined above. The general observation was, that as the mouth became affected, the violence of the febrile symptoms abated.

that state of the system, which is to be relieved by opiates combined with mercurials; but the complete diagnosis of this state is as yet a desideratum.

When these medicines were used in combination, it was generally in doses of five grains of calomel, with as many of Dover's powder given every sixth hour. Larger and more frequent portions of both were occasionally ordered, but I think it appeared that the more moderate doses were productive of equal advantage.

When calomel was given, it was common to order it combined with equal portions of antimonial powder. As the latter was not a remedy on which much reliance was placed, and as it was speedily determined to the bowels by a combination with laxatives, it is difficult to say what was its effect, or if any effect was produced by it. It seemed to me that equally favourable results followed the use of calomel alone, and the antimonial powder appeared to be altogether nugatory, unless in those cases where it was given in combination with calomel and opium.

If inflammation of the lungs, or abdo-

minal viscera came on late in the course of the disease, or was found to subsist when the patient was introduced into the hospital after an illness of two or three weeks, it was treated on the indications before pointed out, modified by the circumstances of the individual, with respect to the degree of strength and the effect of remedies previously applied.

In these cases calomel was given in the way most likely to produce its effect on the constitution.

At certain periods a strong disposition was manifested to inflammatory affections of the bowels. An attack of enteritis sometimes carried off the patient in the space of forty-eight hours; * in other instances, a tympanitic state suddenly came on, without any previous symptoms of disease in the intestinal canal, accompanied

* Severe inflammation of the abdomen was one of the rapid causes of death. In one case in which the first symptoms of this disease had been noticed scarcely twenty-four hours before death, there was found, on examination, a large effusion of serum in the abdominal cavity, together with vestiges of violent inflammatory action, terminating in sphacelus.

with large evacuations of blood, which were speedily fatal.

Evacuations of blood were however not always a fatal symptom. They sometimes occurred in combination with hemorrhage from the nostrils, the kidneys, with petechiæ, vibices, and with effusions into various parts of the cellular membrane, and yet the patient subsequently recovered. Perhaps the most appropriate treatment of this condition of the system is not yet ascertained, but it has been evident that wine and other stimuli are pernicious in it, and that it is necessary to persist in following the antiphlogistic regimen.*

* In a case of profuse hemorrhage from the intestines happening in the course of fever, which occurred to me in private practice, the flow of blood ceased after the patient had taken a few doses of Tinct. ferri muriatis; thirty drops being given every hour. This remedy was suggested to me by my friend Mr. Mortimer.

I believe the tincture of cantharides to be one of the most efficacious remedies in cases of internal hemorrhage; I first saw it prescribed with this view at the suggestion of the late Dr. Craufuird, of Clifton, in a very obstinate and protracted case of hemorrhage from the uterus. Sixty drops were given every hour until the hemorrhage ceased, which happened very shortly after the exhibition of the

The use of wine and stimuli were many times tried in those cases which have been supposed to call for such remedies, but they were always given with the caution which an experiment required, and generally abandoned on being found to be prejudicial. Wine seemed to be requisite in some of those cases which were brought into St. Peter's Hospital in the last state of exhaustion and starvation, when a sinking pulse and cold extremities indicated that the powers of life were already sinking; but in such instances it was given diluted, and in small quantities. I believe it may be stated that the cases in which it was given, were with very few exceptions those which are marked in the foregoing Reports as terminating in death. Weak table-beer was occasionally allowed with advantage, when the thirst was great and connected with an extremely irritable state of the stomach.

tincture was commenced. No unpleasant effect followed. I have repeatedly prescribed it in protracted menorrhagia with a similar result. It has been given at the Infirmary, in a case of profuse hæmatemesis, which speedily subsided under its use.

The diet of the patients consisted almost entirely of very thin gruel and barley water. In cases of great exhaustion, the effect of the previous circumstances to which the patient had been exposed, beef broth was sometimes allowed. Convalescents were not permitted quickly to return to the use of animal food. The house diet was generally solicited by a patient at least a week before it was allowed; a precaution which, as there is reason to believe, often prevented relapses, since they seldom occurred when this rule was strictly observed.

There was no circumstance which appeared to have a more powerful influence in promoting recovery than the free ingress of pure air.* When the weather was

* All the late writers on fever agree in considering free ventilation as one of the most important parts of the treatment of this disease. My own observation has in general fully coincided with this conclusion. I must not, however, omit to mention one instance of very successful treatment of fever, under circumstances in this respect the most adverse to recovery. I allude to the cases which occurred about two years since, in the Bristol Newgate, and which fell under the care of my friend Dr. Bernard. Forty-two persons among the felons were infected. It is well known that the place in which the felons are confined:

moderate, the patients in the Hospital derived much comfort and refreshment from having their beds placed near an open window, so that the external air might descend immediately upon them, or even pass in a current over them. The necessity and advantage of free ventilation is a fact now so fully acknowledged, that it is needless to say much on this subject. I will, however, add my testimony to an observation already often repeated, that the condition of a patient is sometimes so changed in the course of a single night passed in a well ventilated ward, after being removed from a close and foul apartment, that his disorder can scarcely be recognised by any of its features.* And I have seen patients sink

is one of the most loathsome dungeons in Britain, perhaps I might say in Europe. On entering it a person has the impression that he is breathing a vapour, almost too dense with foetid exhalations to be inhaled. Yet in this horrible place, out of forty-two cases of fever, only one death occurred, and the individual who fell a victim, earned his death by drinking ardent spirits which brought on a relapse.

* See Bateman on Contagious Fever, p. 104, and Dr. Gregory's Letter to Dr. Clarke. Sir John Pringle

under fever in narrow and confined hovels, who probably would have recovered under more favourable circumstances.

I have now completed a brief outline of the plan of medical treatment, to which patients labouring under fever have been subjected in St. Peter's Hospital, and the Bristol Infirmary, during the last three years. Whatever value it may have, is derived from the circumstance of its being simply the result of experiments, conducted on a large field of observation, and unin-

was fully aware of the importance of ventilation in what he calls malignant fevers. He says—"In the first period of malignant fevers, as well as in all the rest, the fundamental part of the cure is to remove the patient out of the foul air. When that cannot be done, the room or ward is to be purified by making a succession of air by means of fires, or letting it in by doors and windows, diffusing the steams of vinegar, or the like; for, whatever medicines are given, whilst the air continues in this corrupted state, or indeed increases in it by the effluvia of the diseased, *there can be little hopes of a cure.* Wherefore in every stage, though the patient can breathe no other infectious air, but of his own atmosphere, it will be necessary to keep the curtains undrawn, and use all other means to procure a free ventilation. *In the strict observance of this rule, will the cure in a great measure depend.*"—(*Pringle on Diseases of the Army.* Lond. 1752. p. 315.)

fluenced by any particular theory or prediction. I am well satisfied in observing that this account, in the most important particulars, coincides with the statements of many respectable writers in Britain and Ireland, who have published the results of their own experience in hospital-practice since the late epidemical prevalence of fever.

The objection commonly urged against the practice of bleeding in fever, and the other measures which are now becoming generally prevalent in the treatment of this disease, is the circumstance that they are in opposition to the notions which have been established in medical schools during the last thirty years. Hence they are regarded as novelties, as a new fashion in medicine, and are consequently looked upon with suspicion. But this appears to be altogether a misconception. If we go back to the times of Diemerbroek and Sydenham, we shall discover no strongly marked difference between the practice of these distinguished physicians and the methods which are now becoming every day more generally prevalent. The best prac-

tioners of that time had no scruple against bleeding and the other parts of the anti-phlogistic regimen when occasion required their use. It is true that the physicians of that age talked a great deal of nonsense about vitiated humours, and the method of assisting their concoction, and that a great part of their medical theory turned upon the supposed methods of answering these imaginary indications; but their ideas were fortunately so vague and fluctuating, that it required little ingenuity to represent any method of practice as consistent with them; and the most intelligent were left at liberty to follow the path of observation.

The nosological definitions and theories of the last age have been productive of much greater evil, inasmuch as they were more precise and intractable, and furnished so much the more inflexible fetters to the mind. Accordingly there never was a time when system and hypothesis had a greater sway, than during the contest of the Cullenists and Brunonians. When at length the medical world became tired of disputing about the spasms of invisible extreme vessels, the wise designs and unfortunatè

the age of the last century was a time of great

mistakes of the *Vis Medicatrix*, the ladder of diseases, and the steps of direct and indirect debility, they again directed their attention to facts, and soon began to return to the good old methods of their predecessors; who, with a still more unmeaning jargon sounding in their ears, nevertheless followed in practice the measures which common sense dictated. One of the most important steps in this late improvement of practical medicine, was the admission of fresh air, and the use of cold water; which, though the former at least had been recommended from time to time by accurate observers from the age of *Arætaeus*, were never so generally established in medical practice, as since the time of the late *Dr. Currie*. Next to this improvement, perhaps equal to it in value, was the adoption of purgative medicines in a more liberal manner than they had been used before, which we owe to *Dr. Hamilton*; and lastly, must be reckoned, the removal of our prejudices against bleeding, which is chiefly to be ascribed to *Drs. Jackson, Mills, and Armstrong*.

SECTION V.

Of the causes of Fever. Contagion. Spontaneous origin. Circumstances which occasion it to become Epidemical.

THE circumstances which give origin to fever, as well as the causes which render it prevalent at particular times, or occasion great numbers of persons to fall under its influence in the same city or district, are subjects, the investigation of which involves the most perplexed and disputed questions in pathology. I have not the vanity to suppose, that the solution of any of these inquiries is reserved for me: nor does an hospital report furnish a proper place for entering at length into a discussion, in which the observations of one individual can avail but little, and which requires an ample and laborious collation of recorded facts and authorities. I shall, therefore, attempt very little more with reference to this topic, than what the nature

of my present undertaking demands, viz. to state some particular facts which have fallen under my notice, together with the general results of my own observation and reflection. This, I know, will not do much towards elucidating these obscure questions. It is, however, only by means of the accumulated testimonies of individuals that such problems can be ultimately solved.

It is a fortunate circumstance for the progress of accurate knowledge, that on most subjects which admit of dispute, individuals are found who volunteer themselves to support almost every supposition that the question can admit. The spirit of contention is a far more powerful and generally prevailing principle than the desire of knowledge or the love of truth; and the former propensity, though not so laudable, has perhaps afforded to society results not less beneficial than the latter. In the support of a favourite speculation, facts are eagerly sought for and recorded, which a common observer would suffer to pass without notice, or speedily forget; and if there is any inaccuracy in the mode of stating them, it is almost sure to be detected

and exposed by the champions of an opposite doctrine.

This polemical mania, or zeal for defending paradoxical opinions, has had, if I am not mistaken, no small share in keeping up the controversy respecting contagion. For my own part, I can attribute to no other motive the conduct of those who maintain that there is no such thing as febrile contagion, or that fever, properly so called, is never communicated from one individual to another. The facts that evince the contrary position have appeared to me so numerous, so striking, and so clearly leading to the inference, that I cannot imagine how they can be overlooked, or their force eluded, except by those who have already determined to what opinion they will adhere.

It is impossible to refer any phænomenon more distinctly to its cause, than the appearance of fever in St. Peter's Hospital, which was traced to an origin in contagion. This disease was several times introduced into the house by vagrants and other paupers, who had been exposed to the infection, or were actually labouring under the symptoms;

and it was repeatedly caught by those who had the most frequent communication with them. Several of the nurses were taken ill, who were employed in attendance on the sick. The medical attendants were in some instances affected:* while other officers of the house, who inhabited apartments similarly situated, but had no intercourse with the infected, escaped. The limits of the hospital were too confined in proportion to the number of inhabitants, to allow an opportunity of sufficient separation; and it was found impossible so to insulate the sick as to prevent all intercourse between them and other persons. Hence it happened in many instances, that the inmates of the house were attacked. The contagion appeared to be more virulent at its first introduction, and some of the old and infirm speedily fell victims to it.† A large pro-

* The two apothecaries to the hospital who held this office in succession during the period of the epidemic, were both attacked, as well as one of the pupils. I experienced an attack in my own person, but whether I caught the infection at St. Peter's Hospital or not, I cannot determine.

† As one instance of this description, I shall mention the case of a man who assisted in carrying out the body of

portion of the cases which occurred among the inhabitants of the house, happened among those persons who were placed under those conditions in which contagion is known to act; coming into immediate contact, or holding some communication with the infected.*

Among the cases that were admitted into the hospital and the infirmary, there were several, the previous history of which leads distinctly to the same inference respecting their origin or mode of propagation.

Several paupers were brought to St. Peter's Hospital in succession from a lodging-house in St. Philip's parish, which seemed to have been a centre of contagion. One man was carried from it into the hospital in the

a patient who was one of the first victims of fever. Almost immediately on his return, he was seized with rigors, and died under the same disease.

* It may be seen in the preceding table of cases, that Seventy instances of fever happened among the inhabitants of the hospital, during the period when infected paupers were frequently introduced. It is the most probable conclusion, that all these cases arose from contagion, especially when it is considered that twenty-four of them took place in persons known to have had communication with the fever ward.

last stage of a typhoid disease, with typhomania, a black tongue, and covered with petechiæ. He died within forty-eight hours after his admission. The hovel was then white-washed, and an attempt was made to purify it from infection. Shortly afterwards two women who went to lodge in it were speedily taken ill, and brought into the hospital: one of them died after extensive gangrene had taken place in her back.

Redcliff-hill is one of the most elevated parts of Bristol: it is exposed to the free access of winds from almost every quarter; being built on a high sand-stone cliff, it stands on a dry soil. Hence, if the fever epidemical in this city had arisen from any local circumstances, such as excite marsh remittents, this place ought to have been particularly free from its ravages. Yet on this hill many families were attacked by fever nearly about the same period. I witnessed this disease in two houses in Redcliff Parade, where I was the medical attendant, within a short space of time; and the cases I allude to occurred in families that were in the habit of frequent intercourse. In one of them, a female servant was first attacked,

and subsequently three children who had been nursed by her. The servant was sent into the infirmary, and the family removed into the country, while the house was white-washed, and as it was supposed thoroughly purified. After their return, two female servants were seized with fever, and sent into the infirmary: it was found that both these women had slept upon a bed on which the first female, who appeared to have introduced the disease into the house, had lain.*

I attended a child labouring under a very severe attack of fever, in Paul Street, Portland Square, situated in a low and flat ground, which, according to a common, though perhaps not well founded opinion, is one of the most unhealthy parts of Bristol. Another child in this family had been sent, as soon as the disease appeared, to the house of a relative on Kingsdown, a hill of considerable elevation. This child however sickened in fever, and a servant of the fa-

* The beds were afterwards boiled by order of the gentleman in whose house the occurrence took place, and no further infection arose from them.

mily on the hill was soon afterwards sent into the infirmary under the same disease. The latter had never gone into Paul Street, and therefore cannot have been subjected to those local miasmata which have been supposed so closely to imitate contagion.

To these facts I could easily add a great number of instances leading to a similar result; but it is unnecessary to accumulate testimonies in order to establish a conclusion which must be forced upon every practitioner, who is not either wholly inobservant of phænomena, or possessed with a scepticism beyond the reach of evidence.

It has frequently been remarked that fever is a disease which becomes communicable to healthy persons only under certain conditions; and that these conditions are different from the circumstances under which the eruptive distempers propagate themselves. On this foundation an attempt has been made to distinguish contagious and infectious maladies. Whether such a distinction in words is worthy of much attention, I do not care to inquire; but the observation which suggested it is amply confirmed, by comparing the different phæ-

nomena displayed by this disease in St. Peter's Hospital, and the Bristol Infirmary. In the former house the medical wards are very small, having been originally destined, not for the accommodation of the sick, but for the abode of paupers: and circumstances rendered it necessary to place the beds very near to each other, and to put too great a number of patients in a given space. Though the windows were generally kept open, and all the attention possible paid to cleanliness, yet offensive smells were often perceptible. It was under these circumstances that the disease was manifestly contagious. In the Bristol Infirmary the wards are very well ventilated; they are lofty and spacious, containing a great mass of air; which is continually renewed. Here also the patients labouring under fever were dispersed among invalids of almost every other description; so that, whatever effluvia emanated from infected bodies, became immediately diluted in the mass of air free from such pollution. Here accordingly no instance occurred of the propagation of fever. None of the nurses were attacked, nor were the patients lying in the adjacent

beds in any instance infected, though cases of the worst description, some of them exhibiting all the symptoms of Typhus Gravior, were placed promiscuously among the other patients, scarcely two feet of space intervening between the beds.

It would appear that private houses are, in general, imperfectly ventilated: the rooms are not spacious enough to prevent the generation of contagion. In a large proportion of the instances in which I have witnessed the occurrence of fever in private families, although great attention has been paid to ventilation, it has seized more than one individual; and in numerous examples it has spread through a whole household. Where this did not happen, it was in consequence of great care taken to separate the diseased from the healthy parts of families. I am not now alluding to the dwellings of the poor. I make the same remark respecting a great number of instances occurring in families possessed of every resource which opulence could afford, and dwelling in the most airy and healthy situations in Bristol and its vicinity. Perhaps the fact which is generally al-

lowed, and is, I suppose, unquestionable, that fever is more fatal among the rich than the poor, may in part be accounted for by the circumstance that the former are attended in their own houses, while the latter are generally removed to hospitals; for those causes which disarm a disease of its contagious quality, are generally found in the same degree to mitigate its severity, and accordingly to diminish the mortality arising from it.

§ 2.

THE opinion of those who maintain that contagion is the sole primary and essential cause of fever, appears to me to be equally hypothetical and overstrained with the doctrine which denies the existence of contagion, though it has been defended with greater skill and ingenuity, and is, in fact, a more specious and probable supposition. According to the writers of this party, the disease we are treating of never originates or springs up afresh: every fever is the offspring of a fever, as Piromis was begotten of Piromis, in eternal succession; at least

the first link of the chain is no where to be seen or sought for, and a strange method of elucidating the propagation of fevers is attempted by comparing it with the generation of animals which always reproduce their own kind. This singular hypothesis has been supported by arguments of two descriptions: first by vague analogies; secondly by negative facts.

1. It is true that small-pox, measles, scarlatina, and some other distempers which are communicated by contagion, do not appear in this climate to arise in any other way; but we are not authorized by any analogy between these diseases and our common continued fever, to make the same conclusion respecting the latter. We know indeed, that there are other diseases capable of propagating themselves, which do spring up as it were under our eyes, and can be satisfactorily traced to their origin. I need only mention the hospital gangrene and erysipelas,* between which and fever there

* With respect to the infectious tendency of hospital gangrene, nothing need be said. The contagious nature of erysipelas seems to have been placed beyond dispute by Dr. Wells. This disease has been manifestly communi-

is in some points a nearer relation than between the latter and the exanthemata, and in this respect particularly, that while the eruptive diseases only attack the same individual once during his life, the hospital gangrene and erysipelas, like the common fever, may recur an indefinite number of times.

2. A large collection of negative facts has been brought forward, and urged with great plausibility, against the supposition that fever arises independently of the previous influence of contagion. This is the attempt of Dr. Bancroft and Dr. Chisholm, two authors of well deserved reputation, who, though they are not a little at variance on certain topics, are arranged beside each other in this part of the controversy. They seem to have proved beyond dispute, that the circumstances supposed to give origin to contagion, have existed even in a very concentrated state, without giving rise to the effect. Prodigious masses of putrefying animal matter have been accumulated, without producing in the persons im-
 cated from one individual to another in the Bristol Infirmary.

mediately subjected to the noisome effluvia emanating from them, any febrile disorder; and in situations where human beings have been crowded together in the narrowest space in which they could exist, and under the severest influence of depressing passions, which are known to increase the susceptibility to such diseases, as in slave ships, no contagious malady has broken out. But all these are negative arguments, a species of reasoning which it is very difficult to render conclusive and satisfactory, because it requires that every probable supposition which the opposite hypothesis admits should be actually disproved, before such evidence can become complete. In the present instance, for example, it may well be conjectured that other conditions besides those already suggested, are requisite for the generation of contagious fever, and that some of these have always been wanting in the cases adduced. The functions of organized beings are so complicated and so imperfectly known, that we cannot subject living bodies to experiments so conclusive as those of chemistry, where all the conditions are clearly defined. Hence we are not autho-

rized in drawing inferences on the negative side with so much confidence.

If we may be allowed on these considerations to set aside the analogies and negative arguments which have been brought to bear on this inquiry, the preponderance of evidence certainly leans towards the other side of the scale. Circumstances which afford an opportunity of tracing the actual rise of contagion from its source, must be rare; yet such instances are not altogether wanting.* But the instances are very numerous in which fever has arisen under circumstances almost precluding the possibility of an origin in contagion, and so many examples of this description have fallen under my own observation, as fully to persuade me that this disease does originate spontaneously, or independently of communication with any infected body.

* Sir John Pringle, an original and accurate observer, and a man of acute discernment, has given his testimony to this assertion. He says he has witnessed the origin of a malignant fever from the noxious effect of a mortified limb in a ward of a Military Hospital.—*Pringle's Observations on Diseases of the Army*, 8vo. London, 1752. p. 292.

Exposure to cold and wet weather, great fatigue, and excesses of various kinds, are very frequently the obvious causes of fever, and the common way of escaping the inference which hence arises, by terming these the auxiliary or accessory causes, and gratuitously presuming that contagion has in every instance previously acted on the constitution, cannot be admitted, unless this supposition be shewn to be at least a probable one. When, as it often happens, this presumption is contradicted by every probable argument, we have no alternative in our decision.

If we divest ourselves of attachment to an hypothesis, and collect our inferences from facts, I am persuaded that we must conclude fever to be a disease frequently excited by the causes above enumerated, but perhaps requiring other conditions not yet ascertained, and generating in the body affected some peculiar matter capable of exciting a similar distemper in a healthy person.

§ 3.

WHAT cause, or combination of causes has occasioned the unusual prevalence of fever during the last three years in various parts of Britain and Ireland, is one of the first inquiries which suggests itself to our minds when we advert to the subject of this Report: and it is a question to which it is not easy to furnish a satisfactory reply.

The first shafts of the pestilence fell upon the laborious classes of society, and in general upon the most indigent of the people; it began in Ireland where the distress was most urgent, and afterwards prevailed through most parts of Britain. Hence the idea was obviously suggested that its prevalence was owing to the distresses and privations which the poor had suffered in consequence of a defective harvest and the want of employment which had preceded its appearance; and such circumstances when they occur, are well known to be the usual harbingers of epidemical diseases. But when the more opulent were involved in the calamity, it could no longer be wholly attributed to these

causes. It might indeed be conjectured, that the contagion having been carried from place to place by vagrants, the richer class became infected through this medium. But the disease prevailed so very extensively among the more opulent people, both in Ireland and, though in a less degree, in various parts of Britain, that this fact, if it were thus to be accounted for, would make it necessary to suppose a much greater diffusibility in the contagion than it is known to possess. The families of the rich often live in a state of seclusion and separation from the community, which the circumstances of the poor do not admit of. Hence contagion could not be diffused very extensively among the former. The disease indeed made its appearance in a variety of situations, wherein the introduction of contagion was extremely improbable, if not impossible. In these cases it must be considered, as I before hinted, to have originated or to have sprung up afresh; and the multiplication of such instances, in other words, the prevalence of fever under conditions which forbid our attributing it either

to the influence of contagion or to the effect of poverty and starvation, indicates that some other causes must be sought for than those which have already been pointed out. I suppose the conclusion we must draw from these considerations is, that some circumstances have lately existed, favouring the prevalence of fever, of a more general influence, than the want of nutriment, or any of the difficulties with which the poor of these islands have been visited. The cause, whatever it has been, must have been commensurate with the effects.

It appears to me that there is no other supposition that can explain these phænomena, except the old fashioned, and almost exploded hypothesis of Sydenham ; I mean the doctrine of a pestilential constitution of the air, or the notion that certain changes take place in the condition of the atmosphere, imperceptible to our senses, and eluding chemical tests, which predispose human bodies to febrile diseases, in such a way, that circumstances which in ordinary times would only give rise to a catarrh, an attack of rheumatism, or even occasion no

indisposition at all, will now in many individuals become the exciting causes of continued fever.

Visionary as this opinion seems to be, when it is first announced, there are several considerations which appear to me to bring it within the sphere of probability.

1. The remarkable changes of form which fever displays during the succession of seasons, indicate that the state of the elements exerts a great influence in developing the character of this distemper. Its various types depend on the predisposition to particular forms of disease, resulting from the influence of the atmosphere in its different states. If it is allowed that these agents exert so much controul over the habitudes of the body as to dispose it to all these modifications in the character of fever, it seems not remote from probability that the general predisposition which renders this disorder epidemical at any particular time, may depend upon the influence of the same causes.

2. The rapid diffusion of epidemic diseases through extensive regions, or their simultaneous appearance over considerable

portions of the earth's surface, seems to evince the operation of similar causes. What less extensive influence, for example, can be conjectured to have occasioned the appearance of the yellow fever in certain seasons, over so large a part of the United States and West Indies? To what other cause are we to ascribe the fatal diffusion of this disease during the present year, through the West India islands, the Continent of America, and the Spanish Peninsula. For explaining such phænomena as these, it is not sufficient to trace an infected ship to a particular port, or to smell out a bog on a piece of marshy ground near some particular town.

This remark applies, indeed, to those diseases which by some writers have been termed epidemic, in contradistinction to contagious maladies. But we have reason to believe that this distinction has been represented by medical theorists as wider than it really is. If indeed the doctrine of the spontaneous origin of continued fever be allowed, I do not know on what plea this disease can be refused a place among the disorders strictly termed epidemical,

for the attempt to discriminate these maladies universally by their type, can hardly be thought to have succeeded.

The history of pestilential and epidemic disorders presents many other facts and considerations leading to a similar conclusion, and evincing that agencies of a far wider prevalence than those commonly suggested, have co-operated in producing and carrying on the trains of phænomena which these visitations have frequently displayed. But this is a subject far too extensive to be investigated on the present occasion, and I have already been led unawares to transgress the limits which I had proposed to observe on this discussion.*

* I am not acquainted with any work in which this subject has been examined with so much ingenuity and learned research as in the Inaugural Essay of my friend Dr. Thomas Hancock, entitled, "*Exercitatio Medica Inauguralis quædam de Morbis Epidemicis Generalia complectens.*" Edinb. 1806. It gives me pleasure to understand that the author is pursuing his enquiry into this most important subject.

P. S. I feel it incumbent upon me before I lay down my pen, to acknowledge the obligations I am under to Mr. W. Swayne, Apothecary to the Bristol Infirmary, and to Mr. Kift, of St. Peter's Hospital, for the assistance they have afforded me, by extracting from the books of the Hospitals with which they are respectively connected, the registers of cases which form the basis of this Work, and on which its value, whatever that may be, chiefly depends.

APPENDIX.

Remarks on the extent of the late Epidemic, and on the measures which are requisite in order to prevent the diffusion of Febrile Contagion in Bristol for the future.

IN order to afford all the means in my power of estimating the extent of the late epidemic, I shall subjoin a statement of the number of cases (including the proportion of deaths) which have been entered on the books of the Bristol Dispensary during the period embraced by the foregoing Reports.

	SOUTH DISTRICT.			NORTH DISTRICT.		
1817.	Cases admitted.		Deaths.	Cases admitted.		Deaths.
June	11	- -	0	— 1	- -	0
July	17	- -	0	— 1	- -	0
August	4	- -	1	— 2	- -	0
September	13	- -	1	— 1	- -	0
October	14	- -	0	— 7	- -	0
November	10	- -	3	— 9	- -	0
December	10	- -	1	— 8	- -	1
	—		—	—		—
Total	79	- -	6	— 29	- -	1

SOUTH DISTRICT.				NORTH DISTRICT.			
1818.	Cases admitted.	Deaths.		Cases admitted.	Deaths.		
January	28	- -	1	—	22	- -	0
February	25	- -	1	—	18	- -	1
March	34	- -	3	—	20	- -	0
April	16	- -	0	—	21	- -	1
May	21	- -	3	—	22	- -	0
June	20	- -	1	—	18	- -	1
July	23	- -	0	—	13	- -	0
August	13	- -	0	—	12	- -	0
September	18	- -	0	—	12	- -	1
October	12	- -	0	—	13	- -	0
November	9	- -	0	—	7	- -	0
December	17	- -	0	—	4	- -	0
	<u>236</u>	- -	<u>9</u>	—	<u>182</u>	- -	<u>4</u>

1819.

January	44	- -	1	—	32	- -	3
February	28	- -	1	—	23	- -	1
March	18	- -	0	—	30	- -	1
April	24	- -	1	—	26	- -	4
May	21	- -	1	—	18	- -	1
June	24	- -	0	—	17	- -	1
July	15	- -	1	—	6	- -	0
August	9	- -	0	—	17	- -	0
September	15	- -	0	—	20	- -	2
October	8	- -	0	—	17	- -	1
November	11	- -	0	—	10	- -	0
December	8	- -	0	—	8	- -	0
	<u>225</u>	- -	<u>5</u>	—	<u>224</u>	- -	<u>14</u>

The total numbers of the cases of Fever which have occurred during the above period at the Hospital, the Infirmary, and the Dispensary, are as follows :

	At the Hospital.	At the Infirmary.	At the Dispensary.
In the last half } of 1817 - }	- 108 - -	72 - -	108
In 1818 - - -	240 - -	284 - -	418
In 1819 - - -	243 - -	291 - -	449
	<hr/>	<hr/>	<hr/>
Total - - -	591 - -	647 - -	975

Therefore the collective number of cases from the Reports of the three Institutions is 2213, a number not surprisingly great if we compare it with the population of Bristol, but certainly sufficient to demonstrate an unusual prevalence of the disease.

BEFORE I make a conclusion I am desirous of submitting to the public some hints respecting the measures which appear to be requisite, and are likely to be found effectual, for preventing or diminishing in future the diffusion of contagious Fever through this city. I have, however, neither opportunity nor inclination to enter upon any topics, which require or admit of much discussion. I shall confine myself to a few remarks which may be considered as little more than corollaries from the foregoing statements.

In the first place it is demonstrated by the facts I have reported that St. Peter's Hospital is a very unfit place for the reception of persons labouring under contagious fever; and as long as the present arrangement continues, it is certain, as far as the future can be judged of from the past, that whenever Fever is prevalent in Bristol, it will diffuse itself among the

inhabitants of that house, and carry off a certain proportion of them, especially of the aged and infirm. It cannot be denied that one *good* object will be obtained by suffering things to remain as they are. A few paupers, and probably two or three lunatics will now and then be provided for without any longer burdening the parishes, and occasionally some orphan children will be got rid of.* But for my own part I am no political economist, and am still so un-

* I must not here omit to remark that whenever any of the contagious diseases of the class to which belong measles, scarlatina, and hooping cough, has been introduced among the children educated in St. Peter's Hospital; it has spread rapidly, and has almost uniformly assumed a peculiarly malignant form. On some occasions the proportion of deaths has been truly frightful. This evidently arises from the unfavourable circumstances with respect to situation, under which these children are placed. If it were practicable to provide an abode for them in an airy and healthy situation, at a distance from the crowd of diseased vagrants who are continually resorting to this asylum, it may confidently be asserted that many lives would be preserved, and a great number of children who are destined to gain their sustenance by labour, would become fitted for their lot by healthy and robust habits, instead of imbibing in infancy the seeds of constitutional weakness and disease.

enlightened as to fancy that the lives of human creatures ought in all cases to be preserved as far as human art can afford the means of prolonging them. If it is our aim to prevent the destruction of lives by the diffusion of contagious disease, this object can only be effected by appointing some other receptacle for infected vagrants and other persons of the description now introduced into St. Peter's Hospital.

The Infirmary is the only institution at present existing in Bristol which can be proposed as a proper receptacle for patients labouring under fever, and it is fully manifest, from the evidence of the preceding Reports, that this house, as far as the accommodation furnished by it extends, is in every respect well adapted to the reception and treatment of cases of this description. It cannot be expected that in any hospital whatever a smaller number of deaths shall be found to occur, or consequently a greater proportion of recoveries. In the next place, as Fever has not, in one example, been known to spread by contagion in this house, it appears that the Infirmary is well fitted to afford the means

of preventing the diffusion of this disease among its inmates, or the community at large.

There are however two considerations which require to be entered upon before it can be determined whether the Infirmary is adequate to supply all the exigencies which, if we may judge from the past, are likely hereafter to arise.

1. It must, in the first place, be inquired whether the Infirmary contains sufficient space for the accommodation of all the infected persons whom it might become necessary to receive, if any regulation were established for removing thither that class of diseased paupers who are at present destined for St. Peter's Hospital, as well as all others whom it might be desirable to concentrate in some one point in order to prevent them from infecting the neighbourhood of their own dwellings.

To this inquiry I shall not pretend to reply. I shall however express my own persuasion, and I believe I may state this to be the opinion of my colleagues in the medical faculty of the Infirmary, that adequate accommodation might be afforded in

that house for a considerably larger number of patients than it has hitherto admitted. And perhaps an arrangement might be made, by which two distinct wards might be appropriated to the reception of cases of Fever without diminishing the number of patients labouring under diseases of a miscellaneous description. If this could be effected, the Infirmary would supply for the admission of cases of Fever a receptacle twice as extensive as the Fever-hospital, which for many years was found sufficient for the metropolis.

2, But, secondly, it must be considered what arrangement would be adopted for sending to the Infirmary the whole number of cases which it would be desirable to remove to a particular receptacle. Unless some effectual measures of that description should be entered upon, no advantage would be obtained by increasing the means of accommodation. And if such a plan could be set on foot, it would immediately afford a decisive experiment, whether the limits of the hospital already established are sufficiently ample to answer all the purpose required.

The only obvious proceeding which suggests itself as likely to be available, is the appointment of a Committee or Board of Health, for the purpose of carrying into effect various measures of medical police. Of what description of persons such a body should consist, I do not pretend to judge, but I presume that it should comprise some magistrates, in order that it might be empowered, as far as legal authority extends; to enforce such regulations as might be resolved upon. It should also consist in part of medical practitioners, who might give their advice with respect to subjects, on which they may be supposed to be particularly conversant.

Under the superintendance of such a Committee, and as a chief part of the same plan, persons might be appointed to visit the different districts of the city, and remove to the Infirmary all such patients of the lower class as might be found destitute of relief at their own dwellings, or under circumstances favouring the diffusion of contagious disease among their relatives or neighbours. They should also be authorized to enforce the purification of infected

hovels by ventilations, fumigations, white-washings, and the destruction of all such articles of furniture as might appear likely to retain the seeds of contagion.

Whatever ulterior measures it may be desirable to adopt, it seems expedient that a commencement should be made by an arrangement of this description, which would be equally requisite for carrying into effect any other plan that may be set on foot. If such an attempt were made, it would soon become manifest, what is the real extent of the evil to be provided against, and whether, and how far it exceeds the resources furnished by the institution already in existence.

THE END.